S. Hrg. 98-83, Vol. III

FIRST CONCURRENT RESOLUTION ON THE BUDGET—FISCAL YEAR 1984

HEARINGS

BEFORE THE

COMMITTEE ON THE BUDGET
UNITED STATES SENATE

NINETY-EIGHTH CONGRESS

FIRST SESSION

STATE AND LOCAL GOVERNMENT
FEBRUARY 4, 1983
FEDERAL BENEFIT PROGRAMS
FEBRUARY 4, 1983
INFRASTRUCTURE AND FEDERAL INVESTMENT
FEBRUARY 18, 1983
AGRICULTURE
FEBRUARY 23, 1983

Volume III

Printed for the use of the Committee on the Budget

U.S. GOVERNMENT PRINTING OFFICE
21-587 O WASHINGTON : 1983

S251-5

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STATE AND LOCAL GOVERNMENT

FRIDAY, FEBRUARY 4, 1983

U.S. SENATE,
COMMITTEE ON THE BUDGET,
Washington, D.C.

The committee met, pursuant to notice, at 10:15 a.m., in room 6202, Dirksen Senate Office Building, Hon. Pete V. Domenici (chairman of the committee) presiding.

Present: Senators Domenici and Chiles.

Staff present: Stephen Bell, staff director; David Hooker, analyst for general purpose fiscal assistance; Richard N. Brandon, minority staff director; and Lisa Faulkner, analyst for general purpose fiscal assistance.

OPENING STATEMENT OF CHAIRMAN DOMENICI

Chairman DOMENICI. The committee will please come to order.

This morning, we continue our series of hearings in preparation for the first concurrent resolution on the budget for fiscal year 1984. Our topic is the impact of the Federal budget on State and local governments.

We have with us Hon. Jonathan Howes, the mayor pro tem of Chapel Hill, N.C., and a director of the National League of Cities. We also have Hon. Robert Honts, who is the commissioner of Travis County, Tex., and chairman of the Tax and Finance Committee of the National Association of Counties. Unfortunately, representatives of the Governors and State legislatures were unable to testify today due to the rescheduling of this hearing. The record will reamin open for these groups to submit testimony for the committee members review.

We are pleased to have these distinguished men testify before us today. I also want to take a moment and add a special thanks to all the witnesses for testifying on such short notice. This year we are attempting to expedite the budget process. Your help in this effort is appreciated.

As you gentlemen know, the Budget Committee and the Congress face a very difficult set of problems in connection with the fiscal year 1984 Federal budget. Even after 2 years of historic budget reduction efforts, further erosion of the economy has pushed deficits into the $200 to $250 billion range. Even with the additional fiscal year 1984 spending restraints proposed by the President, deficits are still projected to be over $100 billion 5 years from now.

WE MUST LOOK AT ALL PARTS OF THE BUDGET

In looking at ways to reduce the large budget deficits, we must look at all parts of the budget. In my opinion, we must restrain the growth of defense outlays and limit the growth of entitlement programs. The entitlement programs now comprise nearly 60 percent of Federal outlays and defense spending is well over 25 percent of the budget. We really cannot deal with budget deficits effectively if we concentrate on the relatively small nondefense nonentitlement programs.

Federal aid to State and local governments actually decreased by 7 percent between fiscal years 1981 and 1982. This came after several years of growth averaging almost 7 percent per year. I do not foresee any large increases in Federal aid to States, but I also do not believe cutbacks in this area will solve the deficit problem. Personally, I would prefer to stabilize aid to State and local governments. I have already cosponsored a bill, S. 41, which will extend the general revenue program at its current authorized level of $4.6 billion, and I have urged the President to use his power to accelerate $1.15 billion of general revenue sharing aid this year to help cities and counties.

Another area we will be looking at is the President's revised "New Federalism" plan. The President is proposing four new block grants: A State block grant to combine education, social services, health, and community development programs; a local block grant to merge general revenue sharing with the entitlement portion of the community development block grant program; a ground transportation block grant; and finally, a rural housing block grant for low-income housing construction and repair.

I will say that we are interested in your assessment of the President's budget as it might impact State and local governments; and we will appreciate and any constructive suggestions you may have.

I will yield now to Senator Chiles.

OPENING STATEMENT OF SENATOR CHILES

Senator **Chiles**. Mr. Chairman, I will put my prepared statement in the record.

While we know over the last decade government shifted heavily toward Washington, and we got to the point where 25 percent of the State and local governments budgets were coming from Washington. There has been an abrupt change, and that has caused hardship, that and the recession we have been in.

I think we will be interested in hearing from our witnesses today what this new initiative does, and whether there is a partnership, and whether they feel this initiative is adequate for local government.

Chairman **Domenici**. Thank you, Senator Chiles.

Prepared Statement of Senator Chiles

I welcome our witnesses today to this discussion of the budget and state and local governments.

In this first week of budget hearings, we have already heard a great deal about the prospects for a partnership between the President and Congress. While the pieces of the federal government must form a partnership to work out a budget, governments at all levels—state, local, and federal—must work with the private sector in a partnership to help restore the economy.

Over the last two decades, it's well-known that the balance of government has shifted heavily toward Washington. We got to the point where 25 percent of state and local budgets were coming from federal government meaning too much federal control. We all ended up paying a heavy price. Washington began to set too many restrictions. State and local governments began to rely too heavily on federal dollars. When the economic crunch came and the flow of federal dollars began to slow down, things were doubly tough for many states and cities.

The challenge we have right now is to strike a responsible balance among levels of government so, together, we can help the economy recover.

We must first understand—and I think we already do—that this is an era of restraint. We are working with less money. So we've got to be careful how we spend it. We've got to identify the most pressing problems and use our dollars effectively.

All of us know the worst hardship that's come from the economic slump: Unemployment. The effect of layoffs in state and local government has crippled many services and put a huge strain on our system of unemployment compensation. Government feels that. But people feel it even more.

Wednesday, Budget Director Stockman told this committee he was "sure there's room in the budget" for some sort of jobs program. I'm delighted to hear that, since there was no jobs program in the President's budget. It sounded to me as though David Stockman has taken an accurate reading of the pulse in Congress about the need to do something now to get people back to work. He, at least, read me correctly. I am more than willing to work with the White House and my colleagues on this committee to devise an effective jobs program.

It must be a program that can get the money to local governments quickly and with enough flexibility to get people back to work as soon as possible. But it will have to be a program that is carefully targeted on the long term unemployed who suffer the greatest hardship. The money just can't be confined to rehiring people in local government. We must have a substantial training component linked to the changing needs of the economy. It needs to be broad enough to get others back on the jobs, back on the tax rolls for necessary services.

You know as well as I do the dimensions of the challenges ahead. Gas prices are down now, but they won't stay down forever. We must make a judicious effort to develop our mass transit so we can handle tightening oil prices almost sure to come later.

Everybody knows by now that municipal water systems are in disrepair all across the country. Bridges are old; roads are crumbling. So there's plenty of work to be done.

We can't do it all now with the state the economy's in. But we've got to get started. As we begin to look ahead, we would be wise to look hard at where we have been.

And learn something.

We must not forget again that Washington can't do everything or tell state and local governments how and what to do. The federalism partnership must be restored.

We've got to remember, as well, that managing our money is essential. The agenda of things to do is so large that the only way we can tackle it is to use funds in the most efficient way we can find.

Of all the things we must learn—and not forget again—it's this: we can't write off government as *the* problem and freeze government out of finding solutions. Government has made many mistakes, but it has had its share of success. I think that's beginning to get through to the President. We will certainly need effective government action to help get us through these tough economic times.

I welcome your testimony.

Chairman **Domenici**. We will now proceed with the mayor pro tem from Chapel Hill, N.C., the Honorable Jonathan Howes. You may proceed, please.

STATEMENT OF HON. JONATHAN HOWES, MAYOR PRO TEM, CHAPEL HILL, N.C.

Mr. **Howes**. Thank you, Mr. Chairman. I do have a short prepared statement, and look forward to a discussion with you and my colleagues here on the panel at the conclusion of that.

Mr. Chairman, and members of the committee, my name is Jonathan Howes. I am a council member and past mayor pro tem of Chapel Hill, N.C.

NLC, as you know, represents approximately 15,000 cities of all sizes in all regions of the country.

I am very happy to be here to discuss NLC's budget and program priorities for fiscal year 1984. I want to say at the outset, however, that our board of directors will not adopt an official priorities statement for 1983 until March 6 of this year. Consequently, my statement must be considered in that light.

Last year, Mr. Chairman, we testified that reducing the budget deficits projected for fiscal years 1983–85 was the most important action Congress could take to end the recession and restore economic growth.

To do so, we recommended reductions in the real growth of defense spending, reductions in mandated cost-of-living adjustments for nonmeans tested indexed programs, and increases in taxes. We also urged a moratorium on further cuts in already hard-hit State and local grant programs.

Although Congress adopted some of these recommendations, the budget deficit continues to escalate. With some modifications, the prescription we offered last year might well be offered again.

UNEMPLOYED NEED JOBS NOW

This year, though, reducing the deficit cannot be the only priority. Although most economists predict a modest economic recovery, virtually none believe that growth will be sufficiently strong to reduce unemployment appreciably, perhaps for several years. Consequently, taking action to reduce unemployment, now at nearly 11 percent, must take on a new urgency.

The unemployed need jobs now and, until full economic recovery is achieved, they will need a source of jobs well into the future. We urge you to consider both short-term and long-term jobs creation programs.

In the short term, many job opportunities could be created throuqh higher funding for such existing programs and activities as general revenue sharing, community development block grants, economic development grants, and repair of public buildings.

There are numerous labor intensive jobs to be undertaken and, most importantly, the delivery mechanisms are already in place. There need not be inordinate delays in hiring the unemployed.

ENACT PROGRAM OF INFRASTRUCTURE MODERNIZATION

In the long term, the need for a comprehensive program to rebuild and modernize our deteriorating public infrastructure is long overdue.

Congress began this task last year with enactment of the 5-cents-per-gallon gasoline tax to finance improvements in highways and transit facilities. But much more remains to be done for water and sewer facilities, local roads and bridges, port facilities, and so on.

The need, in my view, is for Congress to enact a long-term, perhaps 10-year, program of infrastructure modernization, one that provides for periodic setting of priorities among public investments, strong links to economic growth, and reduction of costs to States and local governments.

There are numerous approaches being developed in both the House and Senate. NLC has a task force on public infrastructure, cochaired by Mayor Tom Bradley of Los Angeles and Council President Carol Bellamy of New York, which will work closely with the Congress in developing a viable program.

Let me now turn to some of our major program priorities for 1983, an area in which I need not be very tentative.

INCREASE FUNDING FOR GENERAL REVENUE SHARING

Our first priority, of course, is the reauthorization and adequate funding of the general revenue-sharing program. I have for the committee our recent general revenue-sharing survey, showing how cities use their funds, what percent of their budgets are represented by GRS, and what actions they would have to take if GRS were not reauthorized.

We are urging a 5-year extension of the basic program, with a reasonable increase in funding. Unlike other entitlement programs, this program has had no increase in funding since its first reauthorization in 1976.

Since fiscal year 1977, its funding level has been set at $4.6 billion, which since then has lost about half its value to inflation. We urge you to provide a reasonable funding increase for this program.

Chairman DOMENICI. Without the details of the applications of general revenue-sharing funds, is it fair to say that the cities and counties are already in bad shape? And that if we don't reauthorize the general revenue-sharing program these governments could face a disaster?

Mr. HOWES. That is the word that would apply to many cities, yes, sir. General revenue-sharing accounts for up to 20 percent, or more, of city budgets, and clearly if that money were removed, they would have to replace it or reduce services drastically, and that is a disaster, whichever way they go.

INCREASE FUNDING FOR CDBG AND UDAG PROGRAMS

A second key priority for our cities is reauthorization of the community development block grant program and the urban development action grant program.

In fiscal year 1984, the budget would provide $3.5 billion for CDBG, the current level, and $196 million for UDAG, $244 million below the current level.

We urge you increase funding for both of these programs. A reasonable increase for CDBG would accommodate a growing number of entitlement cities; that is, over 50,000 population, that will qualify for eligibility in the early 1980's; the increased demands on the program resulting from termination of the 312 rehabilitation loan program and substantial reductions in such programs as low-income weatherization and EDA; and greater pressure on the use of CDBG funds for social services, particularly for the homeless. The number of homeless in our cities is growing, and programs like CDBG and revenue sharing are our best tools to deal with this critical problem.

With respect to UDAG, we understand that the administration cut is based on the large backlog of unused funds available. The backlog is due to two factors: The impact of the recession and high interest rates on prospective developers and the difficulties of small cities in developing viable projects.

The first of these reasons will be less important as the economic recovery takes hold and interest rates continue to decline. With respect to the smaller cities, we understand that HUD is increasing its technical assistance to small cities on UDAG projects.

We urge you to restore UDAG funding, which provides jobs in distressed cities throughout the country, to its fiscal year 1983 level of $440 million.

RESTORE FULL AMOUNT OF TRANSIT FUNDING

We are particularly concerned, Mr. Chairman, over the President's budget for mass transit programs.

In December, the Congress enacted major transportation legislation substantially increasing funds to revitalize this key part of our public infrastructure. According to that legislation, transit funding in fiscal year 1984 was expected to be about $4.5 billion, including transit's share of the new 5-cents-per-gallon gasoline tax. Yet the budget proposes only $3.6 billion, with a substantial reduction in operating subsidies in fiscal year 1984 and a complete phaseout in fiscal year 1985.

In addition to using new transit funds for reducing the deficit, which former DOT Secretary Lewis assured us and the Congress would not occur, the administration also proposes to deny the flexibility Congress gave cities last year in the unified transit program.

This new program permits cities to use a part of the unified grant for operating assistance, up to their fiscal year 1982 levels, but requires them to give back a portion of their capital grants in return.

We urge you to reject the administration's budget proposal in this area and restore the full amount of transit funding agreed to by the Congress in December.

INCREASE FUNDING FOR SUMMER YOUTH PROGRAM

We would also urge you to increase funding for the summer youth program, for which the President proposes 718,000 jobs, costing $724 million at the current minimum wage and $637 million at the subminimum wage recommended by the President. We have no policy at this time on the subminimum wage proposal.

However, a substantially increased program, at any reasonable wage level, is clearly justified at a time when overall youth unemployment is at 25 percent and for minority youth at about 50 percent.

FEDERALISM PROPOSAL BEING CONSIDERED

Finally, Mr. Chairman, I cannot be very helpful at this point on the President's revised New Federalism proposal.

As I understand it, it no longer deals in any way with income maintenance and health care, and it no longer calls for phasing out

Federal aid for more than 40 State and local grant programs. The revised proposal involves four new block grants, three to States and one involving local governments.

In the local program, general revenue sharing and community development block grant funds would be placed in a trust fund. Each year cities could receive up to 20 percent of their CDBG entitlements in revenue-sharing payments, so that in the fifth year a city could receive all of its CDBG funds in "no strings" attached revenue sharing. At the same time, others could opt to continue any or all of the CDBG program as now administered by HUD.

Our board of directors will give this proposal full consideration in March, when we hope to have full details available. However, I believe we will have very strong reservations.

In our view, eliminating and preventing slums and blight and preserving viable neighborhoods are, and have been, important areas of national concern and responsibility. While it is true that cities would gain in flexibility, there is no denying that every CDBG dollar transformed into a GRS dollar, which need not be spent on these activities, would dilute that concern and responsibility.

Last December, you should know, our city officials overwhelmingly took the position that these two programs should not be included in any New Federalism proposal.

That concludes my formal statement, Mr. Chairman. I look forward to discussion with you.

Chairman DOMENICI. I think we will hear from Mr. Honts before we ask questions. I would just say this: Something that you said about when you would be ready for an official position triggered a notion in my head.

We are going to start marking up on the 7th. You said you won't have an official position until the 6th.

Mr. HOWES. That is right.

Chairman DOMENICI. I do hope that as you evolve some of the positions that you will communicate them as early as possible. Obviously, if they are not ready until the 7th, the positions will not arrive in time. We are going to mark up the whole week, but I think the sooner you can get us your position, the better.

Mr. HOWES. We are certainly mindful of that date. We are also concerned that our board of directors have a full opportunity to make their feelings known on this subject. We will work with the staff to get those figures to you as we go along.

Chairman DOMENICI. Thank you very much.

Mr. Honts.

STATEMENT OF ROBERT HONTS, COMMISSIONER, TRAVIS COUNTY, TEX., AND CHAIR, TAXATION AND FINANCE STEERING COMMITTEE OF THE NATIONAL ASSOCIATION OF COUNTIES, ACCOMPANIED BY MATTHEW B. COFFEY, EXECUTIVE DIRECTOR OF NACO

Mr. HONTS. Mr. Chairman, members of the committee, my name is Bob Honts. I am a commissioner, Travis County, Tex., chair, Taxation and Finance Steering Committee of the National Association of Counties [NACO], and a member of the State and local coalition. I am accompanied today by Matthew B. Coffey, executive director of NACO.

I am here today on behalf of the counties that comprise the membership of the National Association of Counties [NACO]. The member counties of NACO represent 90 percent of our Nation's population and range from small rural counties with populations of less than 5,000 to densely populated urban counties with populations of over 1 million. These counties provide their citizens with a range of services from maintenance of roads and bridges, to employment and training, to health care, to elderly and child support, to jails.

As former Vice President Hubert Humphrey stated:

> The moral test of government is how it treats those who are in the dawn of life, the children, those who are in the twilight of life, the aged, and those who are in the shadows of life, the sick, the needy and the handicapped.

In my part of the country, it is believed very dangerous to leap a chasm in two jumps. With the promise of new autonomy and fewer Federal mandates, we were asked to take the first jump—reduction of funding and elimination of categorical grants. Gentlemen, the view and the trip were interesting but the sudden stop near fatal.

DOLLARS NO LONGER AVAILABLE

Since reconciliation, counties sustained over a 15-percent reduction in Federal funding. County governments, in 1982, made tremendous efforts to maintain service levels despite funding cutbacks—25 to 40 percent—and still we know that the full impact of the 1981 cuts have not been totally realized. There is now a pervasive feeling among county leadership that all of the significant "fat" has been eliminated. The 1981 cuts forced many counties to reduce employment, to cut back on service hours and services such as day-care assistance, and to postpone badly needed investment in infrastructure repairs. Most counties have had to raise property or sales taxes, a policy viewed unfavorably by citizens who receive, in return, a cutback rather than an increase in services. Counties are facing additional burdens as they strive to support the needy who are now ineligible for Federal AFDC and food stamps. Many counties foresee difficulty in maintaining the fiscal viability of county hospitals that provide services to many poor people who are ineligible for medicare and medicaid. All of these shortfalls come after two decades when local entity debt was increasing more rapidly than the Federal debt rate of increase. In short, the buck stops at the local government level, and the bucks tht once were available from the progressive income tax are no longer on the scene. Services must continue for those who deserve and demand them at the local level. The county commissioner cannot turn his back on his constituents.

We are pleased that the President's budget has retained last year's funding levels for general revenue sharing, payments in lieu of taxes, and the community development block grant. We are disappointed with the cuts in assisted housing, employment and training, most rural programs, mass transit operating assistance, and the urban development action grant program. We are concerned and will oppose future cost shifting to States and local entities.

The elimination of the WIN program, juvenile justice assistance, economic development, and the Legal Services Corporation need to be reevaluated as you adjust your budget priorities.

OFFICIALS PLEDGE TO WORK WITH CONGRESS

County officials pledge to work with the 98th Congress to achieve:

As a primary goal, the reauthorization and adequate funding of the State and local general revenue sharing, community development block grant and urban development action grant programs—the highest NACO and local-State coalition objectives—including allowances for the loss of spending power due to inflation;

Jobs retention and creation, job training programs to assist those in true need, the retraining needs of the unemployed, the sick, the poverty stricken, the disabled, the elderly and children. We note that programs in these areas haver already experienced substantial Federal reductions and cost shifting to States and local governments. We oppose further cost shifting and support full funding of the truly needy served by Federal and State support.

Adequate funding for Federal programs designed to undergird our basic public infrastructure such as roads, bridges, public transit facilities, and water and sewer works. This infrastructure is essential to business, commerce, and agriculture but is deteriorating rapidly as counties fall farther behind because of higher costs, inflation, cost shifting, and limited regressive tax resources.

TYPE OF CONDITION AND NUMBER OF COUNTY BRIDGES INSPECTED BY THE HIGHWAY DEPARTMENT

	Number	Percent of total
Condition of bridge:		
Obsolete	3,619	31.5
Deficient	5,948	51.7
Not deficient and obsolete	1,932	16.8
Total	11,499	100.0

Source: Texas Department of Highways and Public Transportation, Transportation Planning Division (October 1980).

AVERAGE COST PER MILE FOR NEW CONSTRUCTION OF THE TEXAS STATE FARM-TO-MARKET ROAD SYSTEM, SELECTED YEARS

Year	Number of new FM miles	Total cost of new construction (in millions)	Average cost per mile
1948	1,302	$13.6	$10,431
1960	1,013	28.9	28,573
1970	514	30.1	58,441

Source: Texas Department of Highways and Public Transportation, "The Texas Farm-to-Market Road Program in Perspective 1945–79" (April 1971).

FOCUS ON INFRASTRUCTURE REPAIR

We feel that a significant part of the Federal effort should focus on infrastructure repair. Let us review these needs to a Business Week article on the subject:

> Streets and Highways: More than 8,000 miles of the interstate highway system's 42,500 miles and 13 percent of its bridges are now beyond their designed service life and must be rebuilt. And just to maintain current service levels on the roads and highways outside urban areas, that are county and State responsibilities that are not part of the interstate system will require more funds for rehabilitation and reconstruction during the 1980's—over $500 billion—than all levels of government spent on all public works investments during the 1970's.
>
> Bridges: It will cost $41.1 billion to replace or rehabilitate the more than 200,000 deficient bridges—two out of every five—in the Nation. These are almost exclusively a county responsibility.
>
> Sewers: Federal and local government will have to invest more than $31 billion in sewer systems and waste-water treatment plants over the next five years.
>
> Water: The 756 urban areas with populations over 50,000 will have to spend up to $100 billion over the next two decades just to maintain their water systems. Even more money will be required to develop more water sources for fast-growing areas in the southwest and west.
>
> Jails: By one estimate, 1,300 of the Nation's 3,500 jails are now under court orders or are likely to be. Another estimate claims that 90 percent of all U.S. jails do not meet the minimum standards being established by the courts—and thus are likely targets for the class actions that prisoners continue to file against local governments already struggling with rising costs and shrinking tax dollars.

These are basic fields that must be strengthened in any Federal jobs initiative; and policies, including lower interest rates, to provide adequate and affordable housing for all Americans.

To finance these objectives, the county officials urge that the Congress evaluate all Government programs for their cost effectiveness, fairness and distribution to long-term economic growth, including:

Careful scrutiny of the proposed large increase in military spending in light of the excessive projected Federal deficits;

A reexamination of tax policy, including an evaluation of existing tax expenditures, as a way to help close the budget gap. However, we cannot support revenue-raising measures solely designed to reduce the Federal budget deficit if these measures usurp the tax bases and/or taxing authorities of State and local governments—tax resources that have low ceilings, citizen proposition 13 resistance and that are most often regressive and inflexible;

Humane methods of control for the rapid growth of non-needs-tested entitlement programs, including Federal pension and social security cost-of-living increases; and

Effective health care cost containment initiatives that do not result in intergovernmental cost shifting.

Be extremely careful not to place inappropriate limitations on legitimate tax-exempt bonding programs, housing, health, and true industrial development.

As we individually and collectively work together to achieve these objectives and examine programs for cost savings in 1984, we must call attention to the unpredictable Federal budgetmaking cycle and process that is thwarting State and local government efforts to adequately plan our own programs. Delays in Federal budgetmaking, coupled with continuing preemption of State and local tax sources and the potential for shifting of costs of essential programs to State and local governments, is causing serious disruption of our planning and budgeting procedures.

INTEREST IN CONTINUING EMPHASIS OF NEW FEDERALISM

We are most interested in the continuing emphasis of New Federalism. It is, however, not unlike the word "crisis" in the Chinese language which has two symbols: one for opportunity and the other for danger.

We stand ready to work as equal partners with the President and the Congress in new opportunities present in our federal system of government; especially in fields where State and local governments have specific administrative and programmatic capabilities and responsibilities. We will consider the President's New Federalism initiatives at our upcoming meetings, but we must emphasize our deep regret that Federal assumption of medicaid has been excluded from the latest proposal and our concern about the lack of allowance for shrinkage of spending power in general revenue sharing and community development block grants due to inflation.

Federalism is more than financial assistance. We continue to urge all participants in federalism decisions to take the broad view that we have consistently recommended. Federalism must also include early consultation; local, State, and Federal determination; stable and predictable revenue sources; grant consolidation with pass through to local entities; reliance on—rather than preemption of—State and local laws and procedures; full funding of national mandates and requirements; and acceptance of local governments as full partners in domestic programs. In this way, we can realize the opportunity being offered by this President and Congress and minimize the dangers of intergovernmental chaos and service incapacitation.

Our concerns by subject area are detailed below:

GENERAL REVENUE SHARING

We are pleased to see that full funding for the general revenue sharing program has been included in the President's budget. Reauthorization of general revenue sharing is NACo's top legislative priority in 1983.

GRS is a vital program for county governments because it provides us with the flexibility to use funds where they are most needed without being hampered by categorical restrictions.

While we are pleased that general revenue sharing has been included in the budget, we would urge the Congress to make improvements in the program to enhance its value to local governments.

The American County Platform, NACo's policy statement, calls upon Congress to authorize a permanent general revenue sharing program funded by an automatic, annual appropriation of a designated portion of the Federal income tax base.

In addition, our platform calls for inclusion of the States in the general revenue sharing program, and additional flexibility in the public hearing requirements under the law.

With regard to permanent authorization of general revenue sharing funded by a percentage of the Federal income tax base, such a change would reduce the uncertainty experienced by local officials who must budget for programs funded by revenue sharing and would allow the dollar amounts received by county governments to increase absolutely over time.

Let me emphasize that since its first reauthorization in 1976, the level of general revenue sharing funding for local governments has remained constant at approximately $4.6 billion.

During the 7-year period since reauthorization, however, inflation has substantially eroded the buying power of revenue sharing dollars, resulting in a program that effectively provides considerably less aid to local governments than it did in 1976.

NACo urges the Congress, therefore, to permanently authorize general revenue sharing and fund it at a fixed percentage of the Federal income tax base, so that as Federal revenues rise, local governments will realize an increase in revenue sharing funds.

It is our desire also that State governments be permitted to participate in the general revenue sharing program once more. You are well aware of the additional responsibilities that State governments have had to assume under block grants established through new federalism and of the serious fiscal problems confronting many States as a result of the recession and other factors.

States need general revenue sharing in order to fulfill these responsibilities and deal with these fiscal dilemmas without overburdening local governments. They should be brought back into the program at least at the $2.3 billion level of their previous participation.

We also support a permanent countercyclical assistance program to trigger in during times of recession and high unemployment.

HOUSING AND COMMUNITY DEVELOPMENT

NACo has given strong support to the community development block grant [CDBG] program which benefits both urban counties through the entitlement program and nonurban counties through the small cities' discretionary program.

While the policy committees of NACo have not fully had an opportunity to evaluate the President's New Federalism proposal, in the past, NACo has recognized the specific purpose of the community development block grant program and has supported reauthorization as a separate program.

The pressures to deal with increased demands for social services, the problems of the homeless and jobless, the increased need for economic development, and the fact that CDBG has absorbed a number of other categorical programs—makes it imperative that CDBG be funded at a reasonable level.

NACo is deeply concerned about the administration's budget request for low income housing assistance. The budget dramatically reduces the level of assistance, includes a very limited level of new budget authority and assumes program changes which were not approved by Congress last year.

NACo has historically supported a viable funding level for assisted housing with a mix of new construction and existing.

NACo supports the concept of a voucher or certificate program, however, we oppose counting food stamps as income and requiring certificate holders to pay for utilities.

EMPLOYMENT

We are here today to support Federal job creation. Why do we need a Federal effort for job creation? The answer is simple. Our Nation's unemployment rate is expected to reach 11 percent this year. Minority youth unemployment is at a staggering 50 percent. The needs of these people for jobs must be met. We cannot wait.

The current crisis is far more severe than in the past. For a series of forces is now at work that calls into question the ability of local governments throughout the Nation—not only in the traditionally depressed Northeast and Midwest but even in the fast-growing Sun Belt—to provide the infrastructure needed for economic growth.

These forces are: Massive cuts in Federal aid to State and local government; a reduced State and local tax base; record-breaking interest rates; and a reduction in the attractiveness of State and local bonds.

If State and local government cannot find a way out of this bind, the effects will be devastating. It is perfectly true that the private sector has carried the responsibility for economic growth throughout the history of this Nation. But at virtually every stage of the Nation's history, growth was dependent on a balance between private and public investment.

Simply stated we see a Federal job creation effort as the first Federal step to provide jobs needed for the necessary repair of our Nation's basic infrastructure to spur economic growth.

There are many projects that would enable counties to provide much needed services and facilities while accomplishing the goal of putting the Nation back to work, not "make work," but meaningful and satisfying work. These projects require dollars which counties don't have but must spend to meet Federal and State mandates.

Through these suggestions NACo advocates its basic premise relating to job creation: We support paying people to work instead of not to work.

The unemployed person who gets a job from one of these programs doesn't care if it doesn't come at the exact time in the cycle to suit the needs of an economist's theory. It is a job that helps feed a family that would otherwise be hurting.

We advocate Federal job creation at times of extremely high unemployment. Yes, we would prefer jobs being created in the private sector. But, the Nation cannot afford to wait until that happens.

We also welcome the President's recommended increase in funds beyond the $25 million recently provided for in title III of the Job Training Partnership Act [JTPA].

We are concerned that the amount of money distributed by formula to service delivery areas under JTPA is decreased from $1.90 billion under CETA in fiscal year 1983 to $1.47 billion in fiscal year 1984, and that the administration no longer supports the JTPA program year concept in its budget.

RURAL DEVELOPMENT

The rural areas of our country continue to suffer from unsafe and unsanitary housing, poor health care and inadequate water and wastewater systems. High unemployment and underemployment have been common problems for far more than a decade. The present economic condition has severely worsened the rural situation.

NACo policy has long called on Congress to appropriate funding for general rural community and housing programs at their fully authorized levels. However, we recognize the growing need to get a better handle on the Federal deficit.

Consequently we were one of the few public interest groups to support cutbacks in rural funding. But, since fiscal year 1981, FMHA rural funding has been cut back by more than 60 percent overall. In fact, the Office of Management and Budget admitted that rural programs have taken a disproportionate share of cuts in our efforts to scale down the Federal budget.

For fiscal year 1984? The President has requested a 65-percent cutback in rural housing programs, and 25- to 35-percent cutback in general community development programs. We urge Congress to hold the cuts at the fiscal year 1982 funding levels. Specifically, for fiscal year 1984 NACo recommends funding rural housing programs at $3.8 billion; FMHA programs for water and waste loans at $375 million, water and wastewater grants at $150 million; community facilities loans at $130 million and rural fire protection at $3.5 million.

TRANSPORTATION

Last year Congress passed landmark legislation designed to complete, repair, and maintain our Nation's decaying transportation systems. A national consensus was reached that we must make the necessary investments in the highway, road, bridge, mass transit, and airport systems which helped make our country work and prosper.

The administration, through its transportation 1984 budget, seems to be attempting to pull back from the initiatives and agreements reached only a few months ago, even with the administration's own user fee concept as the basis for most of the costs. We support continuation of transportation programs at the levels authorized by Congress.

The most extreme departure from the recently signed agreements is in the mass transit program. The Surface Transportation Assistance Act of 1982 called for a reduction in Federal operating assistance of 20 to 25 percent depending on the population of the local transit district.

The administration's budget request for operating assistance calls for a reduction from $875 million in fiscal year 1983 to $275 million in 1984.

The clear intent is then to totally eliminate Federal operating assistance by fiscal year 1985. Even the relatively small section 18 program which provides Federal assistance to rural areas under 50,000 population is treated the same as large urban areas with regard to operating assistance.

Only $18.5 million of this section—the same percentage cut as the program. for areas over 50,000 population—can be used for operating assistance. Mass transit operating assistance should be restored to the levels called for in the authorizing legislation.

The highway program obligation ceiling has been cut from $12.1 billion agreed to in Public Law 97-124 to $11.6 billion in fiscal year 1983 with a further cut of the obligation ceiling in fiscal year 1984.

Even though the administration's budget does not specify which program(s) will be cut, the estimated spending level for the rural and small urban—secondary—road program in the budget appendix is reduced by $250 million from the authorization level in both fiscal year 1983 and 1984.

We recommend that the obligation ceiling for fiscal year 1983 be maintained at $12.1 billion and no further cuts be made in the fiscal year 1984 authorized level.

The Airport and Airway Improvement Act of 1982 authorizes a level of $793.5 million in fiscal year 1984 for airport planning, noise abatement planning and development grants. We believe that the full authorization level should be funded in fiscal year 1984. The administration has requested $700 million. These funds would be derived from the airport and airway trust funds.

ENERGY

The proposed budget for the Department of Energy needs to be closely scrutinized by Congress. NACo is confident that the Congress will readjust DOE's budget priorities, as it has done the past 2 years to produce a more balanced program, but we do want to share some specific concerns.

NACo agrees that the market is an extremely powerful mechanism that should be at the heart of any sensible energy policy. But the DOE budget demonstrates an insensitivity to the limits of the marketplace that can only be addressed by the public sector.

Adequate information is essential if individuals and institutions—including local governments—are to be expected to respond effectively to price signals. And yet the DOE budget for conservation would effectively destroy the information networks such as the Energy Extension Service which individual citizens, businesses, and local governments have depended upon.

NACo protests the virtual zeroing out of State and local programs in conservation, with a proposed cut from $233.7 million to only $3.3 million. State energy offices are playing a critical role in support of local governments and in too many instances, because of fiscal pressure, will be forced to close down without continued Federal support.

The institutional conservation program, which has provided energy audits for public buildings and actually installed conservation materials in local schools and hospitals, also needs to be continued for these financially pressed institutions.

It is also unacceptable for DOE, as we are moving to market pricing in energy, to turn its back on the impacts higher prices will have on the poor. The weatherization program for low-income homes, budgeted this year at $145 million and at zero for next year, must be continued.

Within the buildings and community systems budget, NACo also protests zeroing out the budgets for community systems, urban waste, and the residential conservation service—all important efforts that need to be sustained.

The continued decrease in renewable energy technologies are shortsighted, and will only come back to haunt this country in the future.

NACo policy has strongly supported the need for an active Federal role in helping America realize its solar potential, and hopes Congress will restore the threatened funds.

Finally, emergency preparedness is an area that counties continue to be concerned about, having borne the brunt of full emergencies in 1973–74 and 1979. The proposed budget is inadequate, especially in providing funds for the Federal-State-local partnership that is essential in being prepared for any future energy emergencies.

PAYMENTS IN LIEU OF TAXES

The administration has requested $96.3 million for the payments-in-lieu-of-taxes [PILT] program for fiscal 1984. This is the same level as the 1983 appropriation.

We recognize and appreciate the administration's commitment to the PILT program. However, under the 1984 budget funding for PILT would come from the Mineral Leasing Act receipts before these receipts are distributed to the States and reclamation fund. We agree that funding for PILT should come from activities generated by the public lands.

However, NACo believes that PILT payments should be paid out of the uncommitted 10 percent of the Mineral Leasing Act receipts, rather than from receipts going to other entities.

Enacted in 1976, the PILT program provides minimum payments to local governments to partially compensate them for the tax immunity of Federal natural resource lands. These lands are: national forests and grasslands, national parks, wilderness areas, Bureau of Land Management [BLM] lands, Corps of Engineers and Bureau of Reclamation lands, and inactive Army Reserve lands. PILT payments are distributed to over 1,500 counties nationwide.

Vast holdings of tax exempt Federal lands, particularly in the West, have long deprived counties of a viable tax base. For example, many Western counties contain over 90 percent Federal lands, many Eastern counties contain over 60 percent.

Counties budget for and place PILT payments in their general funds. It comprises over 50 percent of the general fund operating expenses in several Western county budgets.

In the East, PILT is also crucial to county budgets. For example, Swain County, N.C., received $163,000 in 1982, Itasca County, Minn., received $171,000.

The reliance by counties on the property tax underscores how essential PILT is. Nationally, the property tax accounts for 26 percent of county own-source revenues.

However, counties cannot necessarily raise property taxes on their private lands to compensate for the tax-exempt presence of

Federal land. Twenty-six States have some form of tax or expenditure limitation in effect.

The primary source of county revenue is State-shared revenues. However, in this present econonic climate counties cannot turn to the States to make up for their revenue shortfalls.

It has been estimated that States may lose several billion dollars this year because of Federal budget cuts and tax code changes. Thus, whatever small surplus there might be in State operating budgets could be totally wiped out by the end of fiscal 1983. So, counties must look elsewhere.

By the laws of most States, counties must balance their budgets. A local government cannot have a deficit or go bankrupt. The States have to step into the breach, but in light of projected deficits States will be hard pressed to bail out counties who cannot raise adequate revenues because so much of their land is tax exempt.

While necessary, PILT payments do not provide a true tax equivalency. Nationwide, counties only average about 15 cents an acre for the 700 million acres under the program. For example, in Colorado, grazing lands—the least valuable category of lands—are assessed at $1.80 to $44.64 an acre. Counties nationwide actually receive nearly $80 million less than they would have if the lands were privately held.

The PILT program is an excellent example of federalism at work. It is a resource returned directly to the counties, and operates with less than 1 percent overhead and with no redtape or costly, time-consuming application procedures.

HUMAN SERVICES

NACo supports a moratorium on further cuts in needs-tested programs because most of these programs have already been the object of administrative tightening and benefit reductions in the past 3 years, both at the Federal and the State/local levels.

Further cuts of the scale proposed in President Reagan's 1984 budget would only exacerbate problems of poverty, unemployment, and hunger at a time when supports for recovery are needed at all levels of government.

Counties operating the social services and welfare programs have exhausted their capacity to make up financial losses in these programs.

Specifically, NACo opposes proposed budget reductions or deletions that will shift further costs to counties participating in the programs.

COMMUNITY SERVICES BLOCK GRANT

The administration proposes to eliminate this vital poverty program through the budget even though Congress rejected attempts to fold it into the social service block grant, or to severely reduce its funding over the past 2 years.

The suggested rationale that this $348 million program can simply be absorbed by States and counties under the inadequately funded social services block grant is absurd.

The community action programs in many small rural counties serve as the primary social services provider, operating as the umbrella for a variety of community-based services, including Head Start, which the administration wisely proposes to increase.

SOCIAL SERVICES BLOCK GRANT

NACo strongly supports retaining the $2.5 billion level contained in the 1984 budget, and recommends that the $50 million child care add-on adopted by Congress in the continuing resolution be continued.

We oppose the addition of other social services functions into this block grant unless accompanied by the current level of funding.

CHILD WELFARE/FOSTER CARE

NACo supports continued full funding for these programs, to permit implementation of the reforms enacted in the Child Welfare and Adoption Assistance Act of 1980.

The current proposal to fold the child welfare training funds into the services pot of funding represents a cut that seriously hinders the ability of States and counties to carry out the Federal mandates adopted by Congress, and should be rejected. The level needed to implement child welfare services is $164 million, not the $156 million proposed in the budget.

And, of greatest importance to counties in this program is the retention of the foster care entitlement feature, which the budget proposes to repeal.

Without that protection, counties operating foster care programs and institutions will be faced with a cost shift of paying for maintenance care of children otherwise eligible for the protections of the Federal child welfare services.

OLDER AMERICANS ACT PROGRAMS

The budget proposals look especially harsh for the elderly who are facing reductions in medicaid, medicare, social security, energy assistance, and housing subsidies. NACo supports the jobs and nutrition programs which would be reduced $56 million. A moratorium should be placed on further cuts in social services programs for the elderly.

LOW-INCOME ENERGY ASSISTANCE

The 34-percent reduction proposed in this program which saves lives and helps counties preserve safety and dignity for the elderly should be rejected.

The ability of States or counties to transfer funds to the social services block, criticized by the administration, rather than, indicating lack of need for the funds, demonstrates a sound block grant principle: Combining funds assists in improved delivery of services to a similar or overlapping population. NACo supports 1984 funding at the $1.975 billion level.

AFDC/FOOD STAMPS WORKFARE

The National Association of Counties supports authority for States and counties to establish work programs, but we oppose a Federal mandate to do so, because such programs are expensive and Federal funds are not available to implement the requirements.

Since about half the States are experimenting with limited work programs, a mandate for all States to place all recipients into work programs seems premature.

WORK INCENTIVE PROGRAM [WIN]

The proposed elimination of WIN funding is particularly unreasonable if the administration expects all States to implement mandatory workfare. The $271 million should be redirected to helping counties establish work programs for AFDC parents.

FOOD STAMP ERROR RATES

NACo opposes moving the newly enacted 7-percent error penalty rate to 3 percent; it would simply shift costs to States and counties without giving the opportunity to develop compliance systems.

SCHOOL LUNCHES

A budget proposal for food stamp offices to determine school lunch eligibility will be opposed by NACo.

When the administration proposed to reduce food stamps for free school lunches, we found that the administrative problems involved made it costly and very cumbersome.

REFUGEE ASSISTANCE

NACo supports a budget level sufficient to reimburse counties for the costs of assistance to refugees in need. We are concerned that the block grant to States proposed in the budget may fail to meet this criteria.

Although it would base the State's allotment on per capita refugees who aren't eligible for State and Federal assistance programs, it apparently would not bear a relationship to county general assistance and health costs.

HEALTH

NACo is concerned about proposed budget reductions and proposed changes in the way services are paid for that could seriously curtail or eliminate services to Americans who are most in need of care: the poor, elderly and disabled, and poor young children whose future health is dependent upon the care they receive today.

Many of the proposed changes in medicare and medicaid will affect not only those eligible for benefits, but the many millions who are not eligible, but as indigents are dependent upon county hospitals and other county facilities for their care. The proposed changes and continued reductions could seriously undermine the fiscal viability of many of these institutions.

Since 1980, local governments have financed some $60 billion for the provision of health care services. It is inevitable that Federal and State budget reductions and changes in health payment systems will force reductions in services and shift costs to public hospitals, as providers of last resort.

NACo's Health and Education Steering Committee and its medicaid task force have addressed these issues of major concern to county governments.

A variety of possible options are brought to this committee's attention for consideration. Essentially, it is a list of approaches which might be adopted by Congress, in light of the administration's fiscal year 1984 medicare proposals and in light of the fact that medicaid and other health programs have not been increased.

NACo feels that the following suggestions could help offset the full impact of budget cuts on county health care facilities—most importantly, where there are major concentrations of individuals requiring uncompensated care.

The list includes the following suggestions:

The development of special allowances in the medicare reasonable cost reimbursement formula, targeted to the needs of county hospitals and clinics, and nursing homes;

Granting an option to county hospitals, clinics and nursing homes to utilize alternative reimbursement mechanisms, such as prospective reimbursement;

Permit county hospital exemptions from any across-the-board cuts in medicare reimbursement;

Exempt from reductions in the Federal medicaid match rate all medical services provided in county hospitals, clinics and nursing homes; and

Enactment of a dedicated tax as a national revenue source for county hospitals, nursing homes and clinics, over and above medicare and medicaid income.

In summary, these are approaches which give recognition to the special role of county hospitals as the only true safety net in our health care system.

Given their almost total dependency in many urban areas, upon local, State and Federal tax dollars, such institutions are being asked to bear a disproportionate burden of proposed budget cuts, as are the patients they serve.

JUVENILE JUSTICE

For the third time in 3 years the administration is requesting no funds for the Office of Juvenile Justice and Delinquency Prevention, or OJJDP. This decision comes in the face of strong support for the agency from Congress which has appropriated $70 million for OJJDP in fiscal years 1982 and 1983.

The administration's stated reason for eliminating the OJJDP program, by giving it no budget authority, is:

> The primary objective of these programs was to deinstitutionalize juveniles whose offense, such as running away from home, would not be a crime if committed by an adult. This goal has been accomplished.

First, this "primary goal" is but one of the many goals and objectives that are part of the Juvenile Justice and Delinquency Prevention Act.

Second, while recent research shows substantial progress in deinstitutionalizing these juveniles, or status offenders, many States have a long way to go to achieve full compliance.

The extensive involvement of county government in programs for youth has led NACo to vigorously support the Juvenile Justice Act since it was first proposed.

In the few years of its existence, the agency established by the act, OJJDP, has had a significant impact on the Juvenile Justice system in this country. Over 30 States have revised their codes to provide for programs and services that meet the goals of the act.

State and local governments have been able to use federal juvenile Justice funding as seed money with which to try promising programs in their jurisdictions.

What the Federal money did was to allow them to discover that most of these experimental programs did improve their juvenile justice systems. Some counties have picked up the costs of every successful experimental juvenile justice project that was initially funded by OJJDP.

The National Association of Counties believes that the Office of Juvenile Justice and Delinquency Prevention's success rate justifies its continued existence as a separate agency to focus on juvenile problems at the local level. NACo urges the Congress to allow room in the first budget resolution for adequate funding of OJJDP as a separate agency.

CRIMINAL JUSTICE

NACo is pleased the administration is recognizing that there is a role for the Federal Government to play in providing assistance to State and local governments in criminal justice.

We welcome the decision to allocate $90 million for combatting the serious national problem of violent crime and its consequences.

While we cannot support the proposed design of the program, which provides no guarantees for local input, NACo plans to work closely with the administration and Congress to come up with a program that includes a stronger local role.

LEGAL SERVICES CORPORATION

As the committee knows, the administration has twice attempted to abolish the Legal Services Corporation, an agency that provides free legal services to our Nation's poor. The administration's actions come at a time when high unemployment and the recession have expanded the rolls of potential legal services' clients.

The National Association of Counties is deeply concerned over President Reagan's proposed budget allocation of zero funding for the Legal Services Corporation.

While NACo supported the 25-percent reduction in the Legal Services Corporation, we cannot support any further reductions, especially those of such substantial nature as to threaten the very existence of this much needed agency.

Mr. Chairman, we would be happy to answer any questions at this time. Thank you.

CHANGE IN ELIGIBILITY CRITERION SUGGESTED

Chairman DOMENICI. Thank you very much.

With reference to CDBG, I believe there has been a suggestion made that would change the eligibility criterion so that that money would be more available in the cities and counties for use during this interim period of time for the extremely needy, the homeless, and other humanitarian efforts.

Once we created block grants, they got away from being usable for poverty areas and poverty pockets, and were more broadly applied with few criteria by the local governments. We have got to get on with some help. That has generally been resisted in this type of block grants.

What is your feeling about any notion of reversing that because of the extreme problems we have?

Mr. HOWES. Well, I think you have correctly stated our position, which is that to make them overly directed to social purposes would tend to dilute the original purpose of community development. Flexibility is desirable. We would not object more, provided that there is strong emphasis on the national goal that Congress established.

Chairman DOMENICI. So you are not opposed? Redirection so long as the application to the extremely poor is left at the local level, and so that the program is not totally redirected in that manner?

Mr. HOWES. Yes, sir.

SERIOUSNESS OF FINANCING PROBLEM FOR CAPITAL IMPROVEMENTS

Chairman DOMENICI. How serious is the financing problem for capital improvements at the local level now in terms of local money and funding capacity and the like? Either of you.

Mr. HONTS. Mr. Chairman, I can speak to this from direct and personal experience. The combined impact of inflation on costs, and the costs of building farm-to-market roads since 1948 have gone from $10,000 a mile to well over $70,000 a mile.

The impact of that kind of cost increase at a time when the bonding rates have gone as high as they are, which cuts your dollars further because you have to pay more interest, and the fact that we are having to utilize every scrap of taxing authority to support operating programs, the ones we have assistance for are creating a potential disaster in the infrastructure field at the local governmental level, and I believe the cities and counties together share this concern.

Mr. HOWES. I can only add to that a more specific example. The North Carolina Legislature authorized a statewide bond issue for water and sewer improvements in the State. The commitment has been present on the part of the State for a long time to do that, and we needed to renew that commitment.

The Governor has not yet chosen to put the matter before the public for referendum simply because he feels the political situation is not quite right. Because of general opposition to any tax increase and because of high interest rates, we are very reluctant to go into the bond market for programs of this sort.

Despite that, the cities and communities in our State desperately need this kind of assistance to replace the reduced Federal funding.

LIMITED PURPOSE INFRASTRUCTURE BANK

Chairman DOMENICI. Are either of you familiar with the State of New Jersey's proposal for a limited purpose infrastructure bank? In this proposal Federal grant money for sewer programs, State and local contributions, and the user fees that are charged for sewers and other infrastructure programs would go into a revolving fund. The infrastructure bank would then be used on a continuing basis to finance infrastructure programs instead of the small one-time grants that we now give them for sewer and other projects.

Has either of your organizations looked at that as a potential instrument for long-term infrastructure enhancement?

Mr. HONTS. NACo has not considered that in any formal way. As I understand that process, though, it is a means of pooling and utilizing the State credit to some extent for bonding and making available funds on a more reasonable basis.

There are clearly some Federal elements in the water and sewer and wastewater treatment programs that make every city and county consider whether it is worth going through the process in order to get the matching funds, and I think this is designed to remove some of that. Placing it in the States' hands doesn't necessarily do that, though, and that depends on tbe State, I suppose.

Chairman DOMENICI. I wonder if it would be asking too much of you in terms of your staff to take a look at that. I have had some good people look at it, and obviously it cannot be applied across the board to all infrastructure needs that the Federal Government is involved in, because all States don't have this nice, interesting mix that New Jersey does. The program is part Federal and part State and local and almost everyone involves user fees. Therefore, each State's need are different.

We have to find a way to make New Jersey's program legal for them because it is such an exciting prospect. Over the 5- or 6-year period of our program, they will get six to eight times as many projects built, and the revolving fund will still be there. Compared to our partial grant which is a one-time shot in the arm. The States have to find the money to back it up anyway in each and every project, because we never pay for a full sewer facility, and its attendants are formulated to come down. In fact, it goes down to 55 percent. Locals put it in, and then user bonds are used to make it up. But somebody innovative designed this scheme.

I am interested in whether this has a national implication. We continue to try to solve most of our responsibility with annual grants, and it would seem that no one would finance an infrastructure problem, whether it is 100 billion in size or 200.

It seems that nobody would do that on a cash-grant basis, but would find some other way to do it. It would be interesting for a broad-based organization such as yours to take a look at it if you could, and let the committee staff know what you think about it.

Mr. HONTS. How soon would that be timely? How soon do you need that?

NATIONAL INFRASTRUCTURE BANK SUGGESTED

Chairman **Domenici**. Well, anyone that suggested how it might work suggests that it should be initiated with a national infrastructure bank which has capital. That hasn't been settled on, even in an informal manner, but obviously if it has any merit, somebody would have to find room for it in the budget.

My people have been looking at capitalizing it at 5 billion and then permitting each State, not forcing, but permitting, each State to set up an infrastructure bank and then permitting them to elect right off whether they wanted the sewer money going into it with some minimal requirement that would be supervised by the national bank. That is basically the format. We can give you that much.

Surely, we don't have 3 or 4 months to look at it. It is going either to make sense in the next month or be put off a long time.

Mr. **Honts**. We will get you an immediate response from NACo and work with the New Jersey Association of Counties as well.

Chairman **Domenici**. You will find theirs will work if we allow them to put the grant money in. There will be one minor effort to change it, but it seems to this Senator that while we are busy about New Jersey's plan, we ought to look at something broader.

Mr. **Howes**. We share your concerns. We have a blue ribbon task force looking at infrastructure in general and one of the things it is looking at, obviously, is the whole arrangement for financing. It will be meeting at the time of our Congressional City Conference early in March, and, indeed, hopes to get well along in its work by that time.

So we should be able to give you a response.

Chairman **Domenici**. We will have the staff give to your staff the preliminary draft of how it might work, and any comments would greatly be appreciated.

Senator Chiles?

SOLUTION FOR SPENDING JOB DOLLARS IS SOUGHT

Senator **Chiles**. Obviously, one of the areas that is receiving a lot of attention now I notice in the paper this morning is some kind of a jobs bill. Everybody is talking about it, and everybody is rushing to get a jobs bill.

So when that starts happening, we know there is going to be some kind of a jobs bill before this is over.

We don't want to return to the experience that we had in the 1976 recession. That year, the public works act was established to create jobs for the unemployed. It actually took a year for Federal funds to reach the local level. A year is a long time to wait for 12 million persons who are out of work.

What do you think is the best administrative mechanism to allow State and local governments to spend job dollars now? Also, give me a range of how quickly, or what the quickest way is of how we can get money out and what is the best thing that you could do with that money on a timely basis?

Mr. **Honts**. Mr. Chairman, the job bill already passed has merit but it does not really reach local government at all with assistance.

As a suggestion, and we do not have a formal policy on this, but we do have general policy which would urge this kind of approach.

If you would follow the same general format as general revenue sharing. You might itemize the kind of public works projects that would be eligible and then allow the city and county to choose how to spend that money.

I might remind you that in order to do infrastructure, you need money for more than the jobs.

Senator CHILES. I don't have a lot of confidence in that. What do we do about cities where that is a damned nice way of reducing their tax load? You already have public works projects that you are going to do, and you substitute the public money for the public works projects.

We found that time after time in the last public works bill. You had better give me something better than that, or a mechanism to see that we are actually creating new employment out there and not just substituting for budgets that are already established and money is already going out.

Mr. HONTS. I think that mechanism has to be a demonstration by the entity that it is additional work. We are all in annual budgets on capital improvements programs. That is easy to see.

Mr. HOWES. I agree with that. I think you could add jobs in any programs that flow to local governments, particularly the community block program and the mass transit program, where an add-on could be clearly identified and where a maintenance of effort test related to the budget could also be identified. The work is clearly there to be done.

Senator CHILES. I am sure it is, but there has to be some way for us to determine that it is going to be new work.

Mr. HOWES. You know, we work very hard to produce these budgets on an annual basis. I expect that in most cases they are required to be filed with the State, so they are public documents. I think a maintenance of effort provision could cleary be established, so you could assure yourselves that the new money is an add-on and not a replacement.

Mr. HONTS. You could either establish a base, go back 1 year or look at annual budgets already adopted. I think that would make appropriate sense, and has been done in those Federal programs.

REDUCING UNEMPLOYMENT IS THE REAL ISSUE

Chairman DOMENICI. If the Senator would yield, let me ask this question of both of you.

First of all, I associate myself with Senator Chiles' remarks, unequivocally. I was 4 or 5 years into the institution, Senator, when we got accelerated public works, and I know what we all did, we all ran excitedly, and when each little community announced they were going to build a sewer plant, we all took credit.

It turned out we didn't get the public works built until we were out of the recession and into 14 percent inflation. And, perhaps, we built some things that otherwise wouldn't have been built.

I have another concern. The Senator is right. The papers are filled with jobs bills, but you know, at the same time the jobs bills are being discussed, the real issue has been missed. We want to reduce unemployment around cities that have automobile factories operating at half mast and steel companies producing at 45 percent, and other kinds of fabricators, be it iceboxes or tires, are producing at 45 percent. However, I haven't heard of any jobs bill that is going to put those kinds of people to work. Have you?

Mr. HONTS. May I speak to that?

Chairman DOMENICI. Sure. I am serious.

Mr. HONTS. As far as I know, there is not a steel mill or automobile factory within several thousand miles of my community, but we have a high unemployment rate. The people out of a job in our area are construction workers. I know exactly what to do with those folks if we can put them to work.

I agree with you, an automobile worker may not be able to work in that element, but the homebuilding industry and construction industry is flat on its back, and somehow I don't think we are going to run out of people to hire in these construction programs.

Chairman DOMENICI. So you would agree with me that almost all the jobs programs that we referred to are going to be in some way or other involved in either using unemployed tradesmen in the construction field or helping to train additional tradesmen. But we don't have any jobs program that is going to put the unemployed steel worker to work or the unemployed auto worker to work in one of these programs?

Mr. HONTS. Unless they are going to make construction equipment that we can use. No, I have not seen a program.

Chairman DOMENICI. Senator Chiles?

MAKE TEMPORARY JOBS PROGRAM TEMPORARY

Senator CHILES. Again, after the 1976 recession, we found the temporarily enacted jobs programs, like title VI of CETA and the Public Works Act continued to be funded by the Federal Government and even when we finally tried to cut those funds off, we got a big response from all the mayors talking about "How can you cut us?" In fact, those programs continued for several years after some of us attempted to cut them off.

Again, the mayors said, "How can you cut them off?"

How do we design a temporary jobs program that is temporary, and can be phased out without having all these cries of "It is going to denude us"?

Mr. HONTS. My off-the-cuff reaction to that is to make the string pretty short, a 6-month term on the job, pending reorganization by Congress. Make us all go into it with that commitment up front.

Mr. HOWES. I think that is important. If you know at the outset that it is not going to be a continuing program, but one designed to deal with what we hope is a temporary situation, and that is the understanding on all sides, then I think it is easier to deal with.

Senator CHILES. My very title was "Temporary Jobs Program." We heard from all the mayors and all the counties, and every time we attempted to cut it, because I was leading the floor fight on doing it, all those telegrams came in, and all the troops, said, "Don't cut this."

Chairman DOMENICI. "Go on to the next list."

Senator CHILES. That is right.

Mr. HOWES. It would be good if the economy sufficiently revives so that we don't have to have these jobs. We are in support of the President's objectives.

LONG-TERM TRENDS ARE A CONCERN

Senator CHILES. But those jobs are attractive to the counties and cities. They are assistant librarians and firemen, and they are good things to keep the local tax rates down.

We had pretty low unemployment during the time we are talking about.

I am not talking about the people who couldn't get jobs. We couldn't wean the cities and counties off the jobs.

Mr. HONTS. Senator, I expressed earlier the concern that agencies that I chair at the State level and have worked on are concerned about the long-term trends in cities and counties. It is not unnatural that when they can see their very short tax string becoming shorter and the debt ceilings becoming lower in terms of what they have to do that they would have sought continued assistance. But that couldn't rank on the scale of 1 to 10 with the concern now, which is an urgent crisis.

We understand your statement that you want to make this a short-term relief, but that doesn't mean that down the road we don't have to deal with the long-term trend, because we are headed into real problems.

My suggestion is that there are adequate backlogs of roads, bridges and park programs that, frankly, could be put out with jobs actually on the street in 30 days, if you can make the deal with the local governmental entities to do it, and make them design short-term projects.

Chairman DOMENICI. May I ask again, and if you are not now prepared on this, then by the time of our markup, that you give us some estimate of the cost of this kind of a program?

PROGRAM PRODUCED BY CONFERENCE OF MAYORS

The Conference of Mayors came in last week and had a very quick meeting and produced a resolution. Maybe you all have seen it. It is pretty simple. It contains six programs and costs $31 billion in the first year. One proposal would direct $2 billion in countercyclical fiscal assistance to help with those who are in extreme need right now, such as temporary food and shelter. We do have a different kind of unemployed than we have ever had before. That kind of unemployed is the kind where the automobile worker and the steel worker were doing well. They have been off work a long time and a percentage find themselves really in a position where they have no means of livelihood, and they are putting a big, big burden on local governments and local charities for just those necessities.

Would you all have any way of, from the standpoint of the cities and counties that you represent, No. 1, tell us how serious that is and; No. 2, how much a program like that might cost and; third, how it might be run?

Mr. HOWES. Yes; we can do that. I think the idea of that is very appealing, and there is a need.

Those who represent the Conference of Mayors are for the most part represented as well in our organization, and while we don't have a specific program comparable to that, we will be looking at that and get you something on that.

Clearly, there are people who are unemployed for the first time who are facing dislocation in ways they have never had to do before and never expected to, and they are placing enormous burdens on both municipal governments and the charitable sector. We are going to have to find a way to help them.

Chairman DOMENICI. I would hope in thinking it through, and I don't know what my friend from Florida thinks, but I would hope that it is an adjunct to an existing program, so that you have a structure for delivery, so that you don't reinvent the wheel.

TIME IS URGENT

This certainly is not the kind of aid that you can wait around to set up a structure on. It kind of defeats the very urgency of its purpose. Frankly, I would be very interested in some notion of what that might cost, and how many it might help and what the present level of activities is. Are cities putting as much resource in it as charities are?

We must do something. To find some way to do it, I think this committee is confident to put something in the budget. The Budget Committee does not design these types of programs, but we can put money in the budget to show a clear need for the program.

Mr. HONTS. Mr. Chairman, I think your way to put that money on the street quickly is to turn to your partners in federalism. We have designed those projects, but have been unable to build them because of the funds. It takes 6 months or 1 year to design them, and then the need is past.

Chairman DOMENICI. That is on the public works. I had changed and was talking about helping actually feed and temporarily house the truly needy. We don't have a national program that has that as its emphasis, but perhaps it could fit on some national program that is being administered locally.

If you can build it onto one of them, it is much better.

Mr. HOWES. Yes. The delivery mechanism is already there.

Chairman DOMENICI. I have no further questions.

CONTRACTING MECHANISM INCREASING

Senator CHILES. You raised a point, Mr. Chairman, about what happens when these people get onto a city or county payroll. That appears to be a real problem, because, one, how do you hire somebody and in 6 months later say you are cutting them off? Yet, I see the point where you say you are our local partner, and you have the jobs out there which need to be done.

Is there some way—what if this money came to you all and in return you contracted some of the jobs that need to be done as opposed to putting people on the city payrolls? Would that take a long period of time?

Are we talking about something that would greatly delay it? What are the problems there?

Mr. HOWES. I think local governments are increasingly using the contracting mechanism.

Senator CHILES. I know you are.

Mr. HOWES. And I think that is an idea worthy of consideration. It certainly builds upon a mechanism already in place. So I would think that that is something that could be used.

I would hate to see it mandated, though. It ought to be an option available to cities, not a requirement.

Senator CHILES. Do you have any comment on that?

Mr. HONTS. Contracting is a growing area where local governmental entities are finding ways to perform jobs in some cases more efficiently. It adds an extra level of control on the element you are talking about, and that is being sure that you are not adding merely to a profit margin, but in fact are putting new people to work.

This is a personal feeling, that while contracting might work in that way, every city and county would have to design an RFP approach, give everybody an opportunity to bid on it, and then control it very carefully to be sure you are not just adding to the profit margin in areas where maybe they didn't add employment.

My own feeling is that a quicker shot is to go through the public payroll. But that is a personal reaction.

Senator CHILES. Mr. Howes, you raised a question on mass transit, and so forth. I share you concern on that. When I first saw those numbers, I really was a little appalled by them. I did have to remember that those of us on the Budget Committee did stand on the floor and point out that the gross revenues were not going to be the net revenues, that there was going to be 1½ billion less than the gross, because of corporations being able to deduct their share from their tax dollars, their share of this tax, and so I think that we are going to have to look at that and see what the administration is doing, albeit that even with that I think they are still sort of changing the mandate that the Congress set up, and that if we really agreed to with the Secretary, and we do want to see that the Secretary is not particularly using this thing to balance the deficit, but if he is using net money rather than gross money, I applaud him for that, because that was a requirement in fact.

We got that tacked on to do that. So I think we have to balance that off.

Mr. HOWES. I am pleased that you share our concern on that.

Chairman DOMENICI. Did you have anything further you would like to comment on?

Mr. HONTS. Only that we appreciate the obvious and direct concern that you are showing in this area, and we are glad to provide the additional information on the New Jersey plan and in any other way, if you will contact our staff, we will respond to you.

Senator CHILES. Thank you all for your testimony.

Chairman DOMENICI. We stand in recess.

[Whereupon, at 11:20 a.m., the committee was recessed, to reconvene at 2 p.m., the same day.]

FEDERAL BENEFIT PROGRAMS

FRIDAY, FEBRUARY 4, 1983

U.S. Senate,
Committee on the Budget,
Washington, D.C.

The committee met, pursuant to recess, in room 6202, Dirksen Senate Office Building, Hon. Pete V. Domenici (chairman of the committee) presiding, beginning at 2:10 p.m.

Present: Senators Domenici and Chiles.

Staff present: Stephen Bell, staff director; Mike Carozza, analyst for income security; Anthony McCann, analyst for health programs; Richard N. Brandon, minority staff director; and Kathy Deignan, analyst for health policy.

OPENING STATEMENT OF CHAIRMAN DOMENICI

Chairman Domenici. This afternoon's hearings will come to order.

The financial crisis facing the social security system has been front page news for the past year. No one can deny that social security has large funding problems or that it must be made solvent very soon.

SOCIAL SECURITY NOT THE ONLY PROGRAM IN TROUBLE

While we have been fighting the fire in social security, we may have missed the smoke coming from several other programs. Social security is not the only work-related health or retirement program in trouble. Let me give you some other examples.

The medicare hospital insurance program will be bankrupt by the end of the decade, or sooner if social security continues to borrow funds. The medical insurance part of the program which pays for physicians' services is growing at an even faster rate. The longrun deficit in medicare financing could exceed the expected deficit in social security.

The railroad retirement system may be insolvent as early as April 1984. Unless rail labor and management agree on a solution to this problem, benefits may have to be reduced as early as October 1983 to prevent insolvency.

The Federal civilian and military retirement system combined have an unfunded liability of about $1 trillion. There is no immediate crisis in these programs only because the general fund of the Treasury covers most of their rapidly increasing costs.

We still have time—not much—to figure out how to balance the income and outgo of these programs, how to balance the needs and expectations of recipients with the ability of workers and taxpayers to pay for these programs.

If we are diligent we may avoid the situation that developed in social security. No one wants millions of America's elderly to wonder if their checks will be in the mail or if their health benefits will be available when needed. No one wants to see young workers question whether these programs will still be around when they retire.

The Budget Committee has a unique perspective on these programs. It can view these programs collectively and evaluate the priority they should be given among the many needs competing for Federal dollars.

EXAMINE AGGREGATE BALANCE SHEET

With that unique perspective, though, comes a unique responsibility. It is our responsibility to examine the aggregate balance sheet of all of these work-related health and retirement programs. Six programs—social security, medicare, railroad retirement, and Federal civilian and military retirement—will cost $296 billion in fiscal year 1984 under current law. That is 34 percent of the entire Federal budget. Without any action by Congress, the programs will grow to around $413 billion by fiscal year 1988.

We have a pretty good idea of how benefits will grow in the next century. We are much less certain how we will find the money to pay for them. We are not certain how the tax burdens will be regarded by future generations of Americans. What does it mean for the budget and the economy and citizen support for these programs when half of all Americans already pay more in payroll taxes for health and retirement programs than they pay in income taxes?

The hearing today is a very important part of our work on the fiscal year 1984 budget. We must assess how these programs collectively affect the Federal budget and the economy, both in fiscal year 1984 and the longer term. We must be mindful of the capacity and willingness of workers to pay for benefits now being provided as well as those being promised in the future.

To help in our examination of issues in this area, the Congressional Research Service is preparing a major study on these programs. We expect it to be ready by the end of the month. I believe the committee members and the public will find it a very useful document.

I would like to introduce our witnesses and thank them for testifying. First, Mr. Edwin C. Hustead. Mr. Hustead is the director of actuarial consulting services for the Hay Group.

Next, Dr. Sylvester Schieber. Dr. Schieber is the research director at the Employee Benefits Research Institute.

Next is Dr. Jack A. Meyer. Dr. Meyer is resident fellow and director of the Center for Health Policy Research at the American Enterprise Institute.

Finally, I would like to introduce Dr. Carl Schramm. Dr. Schramm is the director of Johns Hopkins University's Center for Hospital Finance and Management.

From my standpoint, the subject matter that you are going to discuss with us is one of the most important subjects in the whole budget, perhaps rivaled to some extent over the long haul by the problems we are having with the adequacy or inadequacy of the levels of defense funding. From the standpoint of entitlements, their growth, and what happens to some of the basic entitlement programs, two of which we will speak of today, civil service retirement and medicare, I don't think there is any question that they are at the heart of the solution to a long-term problem.

We are very appreciative of the time you have spent working on them.

If you don't mind, I have the four of you in the following order, and will call on you in the order I have them. I don't know how much time Senator Chiles has, but from my standpoint I have to leave in about an hour, or 1 hour and 15 minutes, and am not sure if we have any other senators. We will find out in just a minute.

Senator Chiles, do you have an opening statement?

Senator CHILES. Mr. Chairman, I have a prepared statement that I will submit for the record.

Prepared Statement of Senator Lawton Chiles

A large, and growing, part of the Federal budget represents a commitment to maintaining adequate income and health care for the nation's workforce in their retirement years. The so-called "work-related entitlement" programs we will be examining today represent annual (fiscal year 1984) Federal expenditures of 273 billion dollars, 32 percent of the entire unified federal budget.

These programs--Social Security, Medicare, Civil Service and Military Retirement, and Railroad Retirement--are now, or will soon be in trouble. Under existing law, none of them are funded at a rate that will allow us to maintain the current level of retirement benefits.

Today we are in the middle of a very difficult decision-making process on how to make sure that Social Security retirement benefits will continue to be paid. We all know how hard that has been. We are approaching the last minute--literally--in finding a solution to Social Security's short-term funding problems. And we still don't have any agreement on how to tackle the long-term Social Security deficit.

I have spent quite a bit of time with Social Security. We have known for a long time just what kind of trouble we were going to have, and one of the things I feared most was that we would delay and delay until we had very few workable options left to make necessary adjustments in Social Security funding. I am afraid that is just about what happened, and we aren't over the hump yet.

We have to avoid being in the same position with these other programs.

Medicare will be next.

- Under current law, we will be spending 61.5 billion dollars in 1984 for health care for retired workers. Without increases in beneficiary premiums and general revenue contributions every year, the Medicare Part B Medical Insurance Program would not collect enough to keep up with the doctor bills it pays.
- The Medicare Hospital insurance trust fund is today paying out more than it is taking in through the Health Insurance Trust Fund portion of the Social Security

payroll tax. Over the next 25 years, the Health Insurance Fund is projected to have a deficit of 1.48 percent of payroll, even after last year's reductions in hospital reimbursements.

These Medicare deficits will continue to threaten the whole Social Security system. Right now, Medicare outlays will grow from about one-fifth of the total Social Security system in 1982 to about one-third by 1991. If one-third of the system is out of balance, it cannot be called financially sound.

The 1982 Report of the Social Security Trustees, the most recent one we have, projects that the Medicare hospital insurance trust fund will be bankrupt by 1990.

But I fear that we will very soon be seeing that date officially moved up several years. Since that projection was made, we have taken 12 billion dollars more from the Health Insurance fund to put into Social Security than was counted on. And we have continued to have higher than expected health care inflation (triple the Consumer Price Index last year). And unemployment. If the National Commission on Social Security Reform's recent recommendation to continue interfund borrowing through 1987 is enacted, Medicare's "zero hour" will come even sooner.

How we approach this problem is of vital importance to 30 million Medicare beneficiaries--but it is also of vital importance to the national economy. The program's economic impact is significant. Health care is big business. Medicare now accounts for 17 percent of all health care payments in the United States, and Medicare alone will soon grow to one and a half or two percent of the total Gross National Product.

We have already taken some actions to reduce expenditures through containment of hospital costs. We expect to do more through enactment of a new method of paying hospitals that will encourage efficiency and cost consciousness-- prospective reimbursement. But further large savings from this reform, if any, will not come for a few years. I only hope it will not be too late for the Medicare program itself.

This year, the President is proposng major new beneficiary cost-sharing as a way to further reduce Medicare outlays. Whether or

NOT THIS PATH IS REALISTIC FOR THE SHORT-TERM, AND WHETHER OR NOT THIS OPTION WILL HAVE ANY LASTING EFFECT ON OVERALL HOSPITAL UTILIZATION AND HEALTH CARE COST INCREASES WILL HAVE TO BE CAREFULLY EXAMINED.

THE CIVIL SERVICE AND MILITARY RETIREMENT SYSTEMS ARE NOW UNDERGOING INTENSE SCRUTINY. OVER THE LONG TERM, THE CIVIL SERVICE RETIREMENT SYSTEM HAS UNFUNDED LIABILITIES OF 495 BILLION DOLLARS. COSTS ARE NOW ABOUT 35 PERCENT OF PAYROLL. BENEFIT PAYMENTS ARE 5 TIMES EMPLOYEE CONTRIBUTIONS.

THE BUDGET WE HAVE JUST RECEIVED FROM THE PRESIDENT SEEMS DETERMINED TO GET THE COSTS OF THE CIVIL SERVICE RETIREMENT SYSTEM DOWN TO 22 PERCENT OF PAYROLL ALMOST IMMEDIATELY. AND THE OPTIONS THE PRESIDENT HAS PUT BEFORE THE CONGRESS ARE GOING TO BE VERY DIFFICULT FOR MANY TO SWALLOW. I KNOW THAT THERE IS A LOT OF WORRY ABOUT WHAT WILL HAPPEN TO THE CIVIL SERVICE RETIREMENT FUND IF THERE ARE NO FUTURE CONTRIBUTIONS FROM NEW FEDERAL WORKERS--AS PROPOSED BY THE NATIONAL COMMISSION ON SOCIAL SECURITY REFORM. IF THIS PROPOSAL IS ADOPTED, WE WILL ALSO NEED TO CONSIDER HOW TO FASHION A SUPPLEMENTAL FEDERAL RETIREMENT SYSTEM THAT WILL BE FAIR TO ALL RETIREES.

THESE ARE ALL VERY DIFFICULT ISSUES TO DEAL WITH--BUT THEY WILL HAVE TO BE FACED. AND I FIRMLY BELIEVE THAT THE SOONER WE FACE THEM, THE BETTER OFF WE'LL BE. WE HAVE TO FIND INCREASED REVENUES, OR REVISE BENEFITS, OR DO BOTH.

AND WHEN WE DO THAT, WE HAVE TO CONSIDER THE RELATIVE EFFECTS BETWEEN ALL THE PROGRAMS--AND BETWEEN PRIVATE RETIREMENT SUPPORT SYSTEMS AND HEALTH INSURANCE PLANS. RIGHT NOW, OUR NATIONAL RETIREMENT POLICY--IF WE CAN CALL IT THAT-- IS A TIGHTLY-INTERWOVEN WEB OF A NUMBER OF DIFFERENT FEDERAL PROGRAMS AND PRIVATE RETIREMENT PROGRAMS. WHAT WE DO IN FEDERAL PROGRAMS WILL FORCE CHANGE IN PRIVATE PROGRAMS.

WE NEED TO SERIOUSLY CONSIDER OUR OPTIONS AS SOON AS POSSIBLE--SO WE HAVE TIME TO ACHIEVE A GOOD MIX.

Chairman DOMENICI. Let's start with Dr. Carl Schramm, director, Center for Hospital Finance and Management, Johns Hopkins University.

STATEMENT OF DR. CARL SCHRAMM, DIRECTOR, CENTER FOR HOSPITAL FINANCE AND MANAGEMENT, JOHNS HOPKINS UNIVERSITY

Dr. SCHRAMM. Thank you, Senator.

It is a pleasure to be with you today to talk about what you, I think rightly, characterize as one of the most perplexing and severe problems that will be percolating through the discussions of the Federal budget this year; that is, the growing escalation of the costs of supporting, through the Federal budget, our title 18 and title 19 programs, medicare and medicaid respectively.

I think it is certainly worthy of remark that in a period where hospital costs have outstripped the rate of inflation in the CPI last year on the order of magnitude of three times, in the year 1983 when the percent of gross national product consumed by health care will break the 10-percent barrier, the discussion and focus in the policy circles revolves around how it is we can salvage the programs, how it is that we are watching the emergence of what appears to be a two-class system arising on the horizon, how it is that we have proposals before you to make the beneficiaries cofund the system, to cut back the dimensions of the medicare program, and so forth.

REGULATE IN-PATIENT HOSPITAL PRICES

Faced with these problems and ironies, I think it is useful for the Congress to consider a number of options, and the one I would like to speak to you about today is the option that has been emerging slowly through the course of a decade in a number of States; namely, regulation of in-patient hospital prices.

One of my duties, Senator, in addition to being on the faculty at Johns Hopkins, is that I have served for 5 years as vice chairman of the Maryland Health Services Cost Review Commission.

Our commission was the first commission to have full regulatory authority over any State's acute-care hospitals. We have been in that business since the general assembly passed our enabling act in 1971, and we have been regulating the rates charged in Maryland since 1976.

During that period, we have been joined in this exercise by five other States, mostly in the Northeast—New York, Connecticut, Massachusetts, New Jersey and, on the west coast, the State of Washington.

I present in my testimony today, I think, some rather extraordinary evidence which is set out at figures 1 and 2.[1] They show respectively the percentage change in expense per admission in these States and in the second chart, figure 2, the percent change in per capita costs of in-patient care.

I think it is worth pointing out that over the period in which regulation has been in place; that is, since 1976, the record regarding inflation in these States has been consistently 3 or 4 percent below the level of inflation in the Nation for the unregulated States.

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[1] See pp. 52 and 53.

Senator CHILES. Tell us how to read these charts.

Dr. SCHRAMM. Yes, sir, Senator.

Figure 1 shows us the rate of change in the expense per admission. That is, the cost of the entire stay in the hospital. You can see, for example in 1981, that for all the States which did not have regulating commissions, the rate of change in inflation was somewhere in the neighborhood of 17.5 percent

REGULATED STATES HAVE LOWER INFLATION

In the rate-regulated States, it was in the neighborhood of 14 percent. That same pattern, if we go back in time, the gap between the dotted line on the bottom, the rate-regulated States, and the solid line on the top, the nonregulated States, is the difference in the rate of inflation in these two sets of jurisdictions.

Now, in sum, the difference in forgone inflation in these States over this 6-year period amounts to over $8 billion. In Maryland alone last year, in 1982, our citizens saved over $64 million in forgone inflation last year. I have enclosed some pertinent estimates as appendixes to my testimony.

Now, these savings have been shared with the Federal budget, because in Maryland our system of ratesetting applies to all payers. Through the waiver requirements and waiver authority of the medicare and medicaid laws, the Health Care Finance Administration has deferred to the rates set by our commission in the State of Maryland for both medicare and medicaid, and as a result these savings have inured to the Federal budget in forgone inflation in those two programs.

Senator CHILES. You are just regulating the State—I mean the nonprofits, or which hospitals are you regulating?

Dr. SCHRAMM. All hospitals in the State.

Senator CHILES. All hospitals, private and public?

Dr. SCHRAMM. Yes; and including the State teaching hospital, as well at the University of Maryland. All inpatient, acute-care hospitals in the State are subject to our jurisdiction.

Senator CHILES. You started that in 1976?

Dr. SCHRAMM. That's right, Senator. I think one of the things worthy of comment is the general assembly passed the law in 1971, and gave us a 4-year startup period which was necessary to develop the baseline information, and the rate regulating methods.

INFLATION WAS IN EXCESS OF U.S. RATE

Chairman DOMENICI. Doctor, are you giving us a disparity in cost of care for the kind of care we are talking about?

Dr. SCHRAMM. Yes.

Chairman DOMENICI. Is there anything else different other than that you have a commission?

Dr. SCHRAMM. No.

Chairman DOMENICI. All that is attributable to the ratemaking that is provided by State law and promulgated by the commission?

Dr. SCHRAMM. I believe that it all is, Senator. Prior to the regulatory experience in Maryland, for example, and in New York, and in Massachusetts, and in Connecticut, and in New Jersey, these five States experienced annual rates of inflation that were in excess of the U.S. rate, and in excess of the top line in this case, the nonregulated States.

I should also point out that in each of these States there are powerful forces of inflation and very costly hospitals in the States I have enumerated—particularly Massachusetts, New York, and Maryland which have sizable medical education enterprises—with enormous teaching hospitals.

These States include all the teaching hospitals connected to the five medical schools in Manhattan, they include the medical schools and all the teaching hospitals in Boston, as well as the University of Maryland and Johns Hopkins Hospital in Maryland.

NO COMPLAINTS ON QUALITY OF CARE

Chairman **Domenici**. Let me ask you one other question, then.

Is there any contention by any significant group of providers or consumers that they are not getting—not providing as good a service or the consumer receiving as good care as the States that don't have this?

Dr. **Schramm**. I don't believe there is any significant criticism to that effect.

For example, regarding the provider question, I have included as appendix 1 [1] a summary of the hospital balance sheet for Maryland, showing that through the regulatory period our State's hospitals have continually gotten stronger from a fiscal perspective.

The State's hospitals in 1981, for example, reported an aggregate profit of over $11 million, such that they have continued to grow in fiscal strength. Our bond ratings have continued to improve, and this, of course, has inured to the citizens in lower rates of interest on publicly offered debt.

Still more importantly, I think, from the fiscal perspective, these hospitals, because of the all-payer prospective nature of the system, have been able to provide care to poor people, because of the ability of the commission to redistribute the burden of bad debt and charity care throughout the entire hospital system. Through our ratesetting mechanism, consumers who are relatively more affluent using suburban hospitals, in fact support the care given in innercity teaching hospitals to other citizens who are relatively less affluent.

Now, from the consumer's perspective, we have never heard a claim raised that this experiment has had any effect on the quality of care provided.

MARKET CONSENSUS GRADUALLY COMING INTO PLACE

As you know, you have heard repeatedly, I am sure, people coming forward saying that it is only through making the market competitive that we will ultimately effect the rate of hospital price inflation. I would just offer that I think one of the ironies is that the Commission pays a great deal of attention to the impact of our decisions on restoring market forces.

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[1] See p. 54.

There is no other State in the Nation that provides its citizens with a publication of the rates in all the hospitals in the State for frequently occurring admitting diagnoses. I have made a copy of this Consumer Guide available to staff.

A citizen in Maryland, unlike any other State, California or Tennessee, Texas, places where the for-profit hospitals are very powerful, can look up in advance and find out what he or she would expect to pay for one of the 15 most commonly occurring diagnoses before they choose their hospital.

In fact, we do have market consensus gradually coming into place, and I think that this is an expected outcome in an industry where market forces were never in place. In fact, I think the job of regulation is to eventually guide the industry into operating in the most effective way, and then go out of business, once the market forces have been established and encouraged by Government intervention.

Senator CHILES. Thank you.

PREPARED STATEMENT OF CARL J. SCHRAMM

MR. CHAIRMAN:

I AM PLEASED TO BE WITH YOU THIS AFTERNOON TO DISCUSS STATE-LEVEL APPROACHES TO SOLVING ONE OF THE MOST PERPLEXING AND COMPLICATED DOMESTIC ISSUES FACING THE NATION TODAY -- HOSPITAL COST INFLATION. IT IS NOTHING SHORT OF REMARKABLE THAT WITH ROUGHLY TEN PERCENT OF REAL G.N.P. DEVOTED TO HEALTH CARE, AND WITH HOSPITAL PRICE INFLATION LAST YEAR RUNNING AT 13 PERCENT, OR ALMOST THREE TIMES THE RATE AT WHICH THE CONSUMER PRICE INDEX ROSE, THAT OUR POLICY FOCUS IN HEALTH CARE IS DESCRIBED WITH PHRASES SUCH AS "A RETURN TO TWO CLASSES OF MEDICINE," "MEDICAID CUTBACK," "COINSURANCE IS THE ANSWER," AND "MAKE THE MEDICARE RECIPIENTS CO-FUND THE PROGRAM." AMERICA IS POSED ON THE BRINK OF RADICAL REFORM OF THE HEALTH SYSTEM -- AND IT IS NOT A STUDIED, DELIBERATE REFORM. IT IS BORNE OF THE NECESSITY OF THE MOMENT AND IT REFLECTS THE UNHAPPY COINCIDENCE OF A STEADILY BUILDING PROBLEM, NAMELY, EXTRAORDINARY INCREASES IN THE DEMANDS FOR RESOURCES MADE BY OUR MEDICAL AND HOSPITAL ENTERPRISE CONTEMPORANEOUS WITH A STAGNATING ECONOMY, ENORMOUS BUDGET DEFICITS, AND THE SHIFTING SOCIAL AND POLITICAL PRIORITIES WHICH ARE REFLECTED IN THE BUDGET.

UNFORTUNATELY, THIS IS LIKE THE COLLISION OF AN IRRESISTIBLE FORCE WITH AN IMMOVABLE OBJECT. ALL AMERICANS WANT ABSOLUTE ACCESS TO THE HIGHEST STANDARD OF MEDICINE -- A STANDARD WHICH BECOMES MORE TECHNOLOGICALLY COMPLEX AND COSTLY EACH YEAR. MOST PEOPLE WANT GOVERNMENT TO CONTINUE

ITS COMMITMENT TO UNLIMITED FINANCING OF THE MEDICARE AND MEDICAID PROGRAMS. BUT, AT THE SAME TIME WE WANT TAX CUTS, INCREASED DEFENSE SPENDING, JOB CREATION THROUGH PUBLIC WORKS, AND CONTINUATION OF FARM PRICE SUPPORTS.

THERE SIMPLY IS NOT ENOUGH MONEY TO GO AROUND. BUT, SURELY, GIVEN THE RESOURCES ALREADY DEVOTED TO THE HEALTH CARE SECTOR, WE SHOULD BE ABLE TO DELIVER HIGH QUALITY CARE TO EVERYONE WHO NEEDS IT WITHOUT DISPLACING POOR PEOPLE AND WITHOUT TAKING AWAY CARE FROM OLDER CITIZENS. I BELIEVE WE CAN DO BETTER WITH WHAT WE ARE ALREADY SPENDING. INDEED, I BELIEVE WE COULD DO AS WELL ON LESS.

IN SEVERAL STATES, TOTAL HOSPITAL SYSTEM COSTS HAVE BEEN CUT WITHOUT GREATLY DISRUPTING THE ABILITY OF ALL TO ENJOY ACCESS TO CARE, OF THE HIGHEST QUALITY, WHEN IT IS NEEDED. THE LESSON OF THESE STATE EXPERIMENTS WHICH HAVE SUCCESSFULLY REDUCED TOTAL SYSTEM COSTS AND PER CAPITA COSTS IS AN IMPORTANT ONE FOR THE CONGRESS TO STUDY, FOR IT HOLDS THE KEY TO SOLVING, TO A GREAT DEGREE, THE PROBLEM WE NOW FACE. THE APPROACH OF THESE SUCCESSFUL STATE EXPERIMENTS RESTS ON THREE PREMISES.

- THE FIRST IS THAT THE HOSPITAL INDUSTRY CAN OPERATE MORE EFFICIENTLY.
- THE SECOND IS THAT GOVERNMENT GUIDANCE IN MANAGING THE HOSPITAL ENTERPRISE AND IN INSURING EQUAL ACCESS TO CARE IS MANDATORY.

- THE THIRD IS THAT SUCH REGULATORY APPROACHES WORK BEST WHEN THEY OFFER MARKET-LIKE INCENTIVES TO STIMULATE EFFICIENT BEHAVIOR.

IN ORDER TO APPRECIATE THESE PREMISES, SOME BASIC UNDERSTANDING OF THE WAY IN WHICH THE HOSPITAL INDUSTRY WORKS IS NECESSARY. THE TRANSACTION BETWEEN THE CONSUMER/PATIENT AND THE HEALTH CARE SYSTEM DOES NOT LEND ITSELF EASILY TO ECONOMIC ANALYSIS. THE SERVICE SOUGHT IS, BY ITS VERY NATURE, SPECIAL. IT IS NOT HOMOGENEOUS IN THAT EACH PATIENT EXPECTS AND IS GIVEN AN INDIVIDUALLY TAILORED SET OF SERVICES. THE PURCHASE OF HEALTH CARE IS A DISCRETE AND DISCONTINUOUS EVENT FOR MOST PEOPLE; THUS, INFORMATION IS DIFFICULT TO ACQUIRE, AND ONCE ACQUIRED IS OFTEN OUTDATED BY THE RAPID DEVELOPMENT OF TECHNOLOGY. THE PATIENT IS, TO A VERY LARGE EXTENT, INSULATED FROM THE COSTS OF RECEIVING MEDICAL ATTENTION BY THE PRESENCE OF INSURANCE. INSURANCE PROTECTS THE CONSUMER FROM INTERNALIZING COSTS, AND, MEDICINE IS TREATED MORE LIKE A FREE GOOD. OUR PRIVATE AND PUBLIC POLICY HAS CONSISTENTLY ENCOURAGED THIS RESULT EVER SINCE WORLD WAR II BY ESTABLISHING RATHER COMPREHENSIVE HEALTH INSURANCE AS AN INCIDENT OF EMPLOYMENT FOR WORKING AMERICANS AND THEIR FAMILIES, AND VERY BROAD COVERAGE FOR THE ELDERLY AND POOR UNDER MEDICARE AND MEDICAID RESPECTIVELY. THE PRESENCE OF INSURANCE, MORE THAN ANY OTHER FORCE, NEGATES MARKET ANALYSIS OF THE HEALTH CARE TRANSACTION. CONSUMERS TURN OVER CONTROL OF THEIR USE OF RESOURCES TO PHYSICIANS. THE ROLE OF THE PHYSICIAN AS

PURCHASING AGENT IS ENFORCED BY THE NECESSARY DELEGATION OF DECISION MAKING IN LIGHT OF THE COMPLEX SKILL AND KNOWLEDGE MEDICINE REQUIRES OF ITS PROFESSIONALS. THE OPERATING PRINCIPLES OF INSURANCE REIMBURSEMENT ARE WIDELY REGARDED AS ESTABLISHING POWERFUL INCENTIVES TO USE MORE RESOURCES, ESPECIALLY HOSPITAL-RELATED RESOURCES, IN THE TREATMENT OF PATIENTS THAN MIGHT BE CLINICALLY NECESSARY.

THESE RATHER GRAND DEPARTURES FROM A MARKET-ORIENTED DISTRIBUTIONAL SYSTEM ARE COMPOUNDED IN THE CASE OF THE HOSPITAL. THE TYPICAL AMERICAN HOSPITAL WAS ESTABLISHED ON EXPLICITLY COUNTER-MARKET PRINCIPLES. AS A VOLUNTARY PROVIDER OF CARE, ADVANCING A SERVICE ETHIC, THE HOSPITAL WAS ORGANIZED TO GIVE CARE EXPRESSLY ON THE GROUNDS OF NEED AND NOT ABILITY TO PAY. AS THE UNIT COST OF A HOSPITAL ENCOUNTER GREW, AND AS HOSPITALS GRADUALLY LOOKED TO PATIENTS TO HELP SUPPORT THE COST OF THEIR CARE, A PHENOMENON NOT WIDELY ESTABLISHED UNTIL THE 1940s, PERSONAL HEALTH INSURANCE PLANS, OFTEN VOLUNTARY IN THEIR OWN ORGANIZATION (E.G., BLUE CROSS), WERE ESTABLISHED TO PROTECT AGAINST ECONOMIC RISK. AS GOVERNMENT ASSUMED THE ROLE OF PAYING FOR CARE FOR THE ELDERLY AND THE SICK IN 1965, A CHAPTER HAD CLOSED ON THE HOSPITAL AS A CHARITABLE INSTITUTION WITH REGARD TO ITS SOURCES OF FUNDING BUT NOT WITH REGARD TO ITS ORGANIZATION OR MANAGEMENT. THE HOSPITAL CONTINUES TO HOLD ON TO THE MANAGERIAL METHODS OF A SMALL, CHARITABLE ENTERPRISE DESPITE A HUGE GROWTH IN ITS SIZE, REVENUE, LABOR FORCE AND RANGE OF PATIENT SERVICES. IT IS

LARGELY THIS UNMANAGED AND UNGOVERNED ASPECT OF THE HOSPITAL WHICH ACCOUNTS FOR THE UNCHECKED GROWTH OF INVESTMENT, TECHNOLOGY AND COSTS CONNECTED TO PATIENT CARE, OR IN A WORD, INEFFICIENCY.

BECAUSE THE EVIDENCE IS CLEAR THAT HOSPITALS CANNOT, BY THEMSELVES, EFFECT SIGNIFICANT CHANGES IN THEIR OPERATIONS TO REDUCE INFLATION IT IS IMPORTANT THAT GOVERNMENT GUIDE THE INDUSTRY THROUGH THESE TROUBLED TIMES. GIVEN THAT HOSPITALS ARE NOT INTERNALLY EQUIPPED OR STRUCTURED TO ESTABLISH OPERATING EFFICIENCIES, GOVERNMENT IS THE ONLY FORCE TO TURN TO FOR HELP. THE HOSPITAL IS IN LARGE PART A QUASI-PUBLIC ENTERPRISE AND GOVERNMENT SHOULD LEND A HAND IN ASSISTING HOSPITALS ENFORCE OPERATING PRIORITIES WHICH RESPONSIBLY CONCERN THEMSELVES WITH THE CONTINUED QUALITY OF PATIENT CARE AND READY ACCESS BUT WHICH ALSO STRIVE FOR REDUCED COSTS IN PRODUCING CARE.

MR. CHAIRMAN, TO DATE THE FEDERAL GOVERNMENT HAS PRODUCED LITTLE WHICH HAS HELPED THE HOSPITAL INDUSTRY MOVE TOWARD MORE EFFICIENT OPERATION. INSTEAD, IT HAS APPLIED ONLY ONE APPROACH, NAMELY THE LIMITS ON ROUTINE COSTS EMBODIED IN SECTION 223, WHICH WAS ONLY RECENTLY EXPANDED TO INCLUDE CAPS ON ANCILLARY REIMBURSEMENT. THIS APPROACH HAS NOT WORKED WELL, AS THE EVIDENCE CLEARLY SHOWS. ON THE OTHER HAND, THERE HAS BEEN ONE APPROACH, TRIED BY A HANDFUL OF STATES, WHICH HAS WORKED AND SERVED BOTH THE CITIZENS AND THE HOSPITALS WELL. I AM REFERRING TO STATE HOSPITAL RATE-SETTING, THE ONLY PROGRAMMATIC APPROACH WHICH HAS SHOWN THE

ABILITY TO PRODUCE SIGNIFICANT, LONG-RUN REDUCTIONS IN THE RATE OF HOSPITAL INFLATION.

I HAVE INCLUDED WITH MY TESTIMONY EVIDENCE OF THE IMPACT OF THESE EXPERIMENTS IN FIGURES 1 AND 2 WHICH SHOW NOT ONLY A REDUCED RATE OF HOSPITAL INFLATION IN THESE STATES BUT ALSO A REDUCED RATE OF CHANGE IN TOTAL SYSTEMS COSTS AS MEASURED BY PER CAPITA EXPENDITURES. THIS PERFORMANCE IS REMARKABLE AND HAS SAVED OVER $8 BILLION IN COSTS ATTRIBUTABLE TO FOREGONE INFLATION IN THE COST OF HOSPITAL CARE IN THESE STATES. A PART OF THESE SAVINGS HAS BEEN ENJOYED BY THE FEDERAL GOVERNMENT, BECAUSE THE RATE OF INCREASE IN MEDICARE AND MEDICAID COSTS HAS BEEN REDUCED AS WELL.

I THINK THAT IT WOULD BE USEFUL TO EXAMINE THE PROGRAM IN MY OWN STATE FOR A MOMENT. IN 1971, THE MARYLAND GENERAL ASSEMBLY PASSED OUR ENABLING STATUTE. IT PROVIDES THAT COMMISSION-SET HOSPITAL RATES SHALL BE PROSPECTIVE IN NATURE AND REQUIRES THE COMMISSION "TO ASSURE ALL PURCHASERS OF HEALTH CARE HOSPITAL SERVICES THAT THE TOTAL COSTS OF THE HOSPITAL ARE REASONABLY RELATED TO THE TOTAL SERVICES OFFERED BY THE HOSPITAL; THAT THE HOSPITAL'S AGGREGATE RATES ARE REASONABLY RELATED TO THE HOSPITAL'S AGGREGATE COSTS; AND THAT RATES ARE SET EQUITABLY AMONG ALL PURCHASERS OR CLASSES OF PURCHASERS OF SERVICES WITHOUT UNDUE DISCRIMINATION OR PREFERENCE." THE COMMISSION BEGAN REGULATING HOSPITAL RATES IN 1975. IN 1977, WE ENTERED INTO A CONTRACT WITH THE HEALTH CARE FINANCING ADMINISTRATION

WHICH PROVIDED A WAIVER OF MEDICARE AND MEDICAID REIMBURSEMENT PRINCIPLES. AS A RESULT, SINCE JULY 1, 1977, ALL PAYORS HAVE BEEN PAYING MARYLAND'S HOSPITALS ACCORDING TO RATES SET BY THE COMMISSION.

THUS, MARYLAND'S SYSTEM IS ONE OF PROSPECTIVE RATES COVERING ALL PAYORS AND ASSURING EFFICIENCY, SOLVENCY, AND EQUITY.

I HAVE INCLUDED IN MY TESTIMONY A COPY OF OUR COMMISSION'S PRESS RELEASE OF FEBRUARY 2, AND OUR ANNUAL DISCLOSURE STATEMENT. THEY REPORT THAT THE COST OF A HOSPITAL STAY IN MARYLAND WENT UP 12.1 PERCENT LAST YEAR, AS COMPARED TO THE NATIONWIDE INCREASED OF 16.7 PERCENT. AND, THE CITIZENS OF MARYLAND PAID $68 MILLION LESS FOR THEIR HOSPITAL CARE LAST YEAR.

THE LESSONS OF THIS STATE EXPERIENCE ARE MANIFOLD.

THE FIRST IS THAT REGULATION WORKS. MUCH HAS BEEN OFFERED IN THE LAST FEW YEARS ABOUT WHY COMPETITIVE SOLUTIONS MUST EMERGE TO REDUCE THE CHOKEHOLD OF HOSPITAL COST INFLATION. FEW CAN ARGUE WITH THIS POSITION IN THE LONG RUN. INDEED, I BELIEVE WE WOULD BE MUCH BETTER OFF IF WE COULD ESTABLISH SOME ATTRIBUTES OF A MARKET SYSTEM INTO THE PATIENT-HOSPITAL EXCHANGE. AS YOU KNOW, SUCH CHANGES REQUIRE AN IMMENSE AMOUNT OF WORK, INCLUDING A SUBSTANTIAL REWORKING OF THE I.R.S. CODE. IN THE MEANTIME, YOU HAVE BEEN ASKED AGAIN AND AGAIN TO STAY YOUR HAND ON THE IDEOLOGICAL ARGUMENT THAT REGULATORY PROGRAMS WILL NOT WORK AND WILL ONLY FURTHER BURDEN THE SYSTEM WITH ADDITIONAL

TRANSACTION COSTS. I BELIEVE THAT HOWEVER ONE CHARACTERIZES THE RATE-SETTING EXPERIENCE, A PHENOMENON WHICH I BELIEVE, IRONICALLY, HAS DONE MORE TO ADVANCE THE EMERGENCE OF MARKET PRINCIPLES THAN MOST OTHER POLICY STEPS ADVANCED IN THE LAST FEW YEARS, THE RECORD IS INCONTROVERTIBLE. STATE RATE-SETTING HAS WORKED, AND WORKED BETTER THAN ANY OTHER HOSPITAL COST-CONTAINMENT EFFORT ATTEMPTED BY GOVERNMENT OR BY THE HOSPITAL INDUSTRY IN A VOLUNTARY MANNER.

THE RECORD ON RATE-SETTING IS IMPORTANT FOR ANOTHER REASON. WHILE THE CONGRESS AND VARIOUS ADMINISTRATIONS HAVE BEEN PARALYZED IN THEIR ABILITY TO PRODUCE AN EFFECTIVE NATIONAL SCHEME OF COST CONTAINMENT, BE IT A COMPETITIVE OR REGULATORY APPROACH, A SMALL NUMBER OF STATES HAVE CHARGED AHEAD AND ASSEMBLED A GOOD DEAL OF WISDOM ON HOW HOSPITALS RESPOND TO VARIOUS REGULATORY APPROACHES. INDEED, IT COULD BE ARGUED THAT A MORE SOPHISTICATED UNDERSTANDING OF THE GOVERNMENT-HOSPITAL RELATIONSHIP EXISTS IN OUR VARIOUS STATE HOSPITAL COMMISSIONS THAN RESIDES IN THE FEDERAL BUREAUCRACY. THE STATES, MOVED BY THE PRAGMATIC FORCE OF REDUCING INFLATION IN MEDICAID COSTS IN ORDER TO EASE THE BURDEN ON THEIR STATE BUDGETS, AND CONCERNED OVER THE IMPACT OF HOSPITAL INFLATION FOR ALL THEIR CITIZENS, HAVE DEVELOPED MODELS OF HOSPITAL-GOVERNMENT INTERACTION WHICH ARE, IN MANY INSTANCES, POSITIVE AND COOPERATIVE. ONE REASON THIS RESULT EXISTS IS THAT THE EXPERIENCE OF PROVIDER-REGULATOR COMMUNICATION IS WELL ESTABLISHED IN THESE STATES AND GRADUALLY BOTH THE REGULATING AGENCY AND THE HOSPITALS HAVE

COME TO UNDERSTAND THE HISTORIC "CALCULUS OF REGULATION." THAT EQUATION GENERALLY OFFERS SOME PUBLIC PROTECTION -- IN THE CASE OF MARYLAND, AN ASSURANCE THAT HOSPITAL SOLVENCY WILL NOT BE THREATENED BY BAD DEBT -- IN EXCHANGE FOR BEHAVIOR FROM THE REGULATED INDUSTRY WHICH RECOGNIZES THAT A HIGHER PUBLIC OBJECTIVE, DECREASED PRICE INFLATION AND MORE EFFICIENT USE OF BUDGETED RESOURCES, MUST BE MET.

THE THIRD LESSON REGARDS THIS "CALCULUS OF REGULATION." IN ANY REGULATED INDUSTRY, THE AGENCY MUST CONCERN ITSELF WITH THE HEALTH OF THE INDUSTRY IT REGULATES. I AM PLEASED TO INCLUDE AS AN APPENDIX TO MY TESTIMONY DATA COMPILED BY OUR STATE'S HOSPITALS SHOWING THAT THEY HAVE BECOME PROGRESSIVELY STRONGER FINANCIALLY DURING THE LAST TEN YEARS. HOW CAN THE APPARENT BENEFIT TO THE CITIZENS IN SAVINGS COEXIST WITH INCREASED OPERATING MARGINS IN OUR STATE'S HOSPITALS?

THE ANSWER LIES IN LESSON FOUR. HOSPITALS RESPOND TO INCENTIVES IN THE PAYMENT SYSTEM. THUS, A RATE-SETTING SYSTEM MUST NOT MERELY BE DESIGNED TO PROVIDE A FLOW OF FUNDS, BUT MUST BE DESIGNED SO THAT DESIRED CHANGES IN HOSPITAL BEHAVIOR IMPROVE THE HOSPITAL'S FINANCIAL CONDITION WHILE HOSPITALS ARE AT FINANCIAL RISK FOR THE COSTS ASSOCIATED WITH UNDESIRABLE BEHAVIOR. WE HAVE ESTABLISHED MARKET-TYPE INCENTIVES WHICH ARE EXPRESSLY DESIGNED AS A KIND OF "VISIBLE HAND" TO REPLACE THE MIS-INCENTIVES WHICH ARE ASSOCIATED WITH COST-BASED REIMBURSEMENT.

IN ADDITION TO RATE SETTING, SEVERAL OTHER STATE APPROACHES ARE BEING TRIED.

IN CALIFORNIA, LEGISLATION ENACTED LAST FALL EMPOWERS A SPECIAL STATE NEGOTIATOR, THE SO-CALLED "MEDI-CAL CZAR," TO CONTRACT WITH LOW COST PROVIDERS TO SUPPLY MEDICAL CARE TO THE STATE'S MEDI-CAL RECIPIENTS. HOSPITALS THAT OFFER TO PROVIDE SERVICES AT THE LOWEST COST WILL BE AWARDED CONTRACTS, AND MEDI-CAL PATIENTS MAY ONLY GO TO THOSE HOSPITALS OBTAINING CONTRACTS. PAYMENTS TO THE HOSPITALS WILL BE MADE ON THE BASIS OF A FLAT ALL-INCLUSIVE PER DIEM RATE, A MECHANISM THAT MAY RESULT IN SEVERAL UNINTENDED CONSEQUENCES. AS HAS BEEN THE EXPERIENCE WITH THE FEDERAL MEDICARE PROGRAM, A PER DIEM RATE PROVIDES STRONG INCENTIVES FOR HOSPITALS TO RECOUP POSSIBLE LOSSES BY INCREASING LENGTH OF STAY. ON THE OTHER SIDE OF THE COIN, A FLAT RATE, IF NOT ADJUSTED FOR CASE MIX, CAN RESULT IN THE UNDERPROVISION OF SERVICES AND THE SKIMPING ON NEEDED CARE, SINCE THOSE HOSPITALS WITH A MORE COSTLY CASE MIX WOULD BE PENALIZED. FINALLY, IF HOSPITALS' COSTS ARE GREATER THAN THE RATES NEGOTIATED, THERE IS A STRONG LIKELIHOOD THAT THEY WILL BE FORCED TO SHIFT THE ADDITIONAL COSTS TO THE COMMERCIALLY INSURED OR SELF-PAYING PATIENTS. IN OCTOBER OF LAST YEAR, ARIZONA BEGAN A THREE YEAR DEMONSTRATION PROJECT WHICH, LIKE CALIFORNIA'S, WOULD SELECT PROVIDERS THROUGH A COMPETITIVE BIDDING PROCESS OR "PRUDENT BUYER" APPROACH. UNLIKE CALIFORNIA'S, IT WILL PAY PROVIDERS ON A CAPITATION BASIS, INCREASING THE INCENTIVES FOR "CREAM SKIMMING."

BOTH OF THESE EFFORTS HAVE BEEN ESTABLISHED IN THE LAST YEAR OR TWO AND NOT ENOUGH IS KNOWN ABOUT THEIR ABILITY TO

REDUCE TOTAL SYSTEMS COSTS. NOTWITHSTANDING SOME POTENTIAL FLAWS THAT MAY BE PRESENT, THEY REPRESENT NEW STATE APPROACHES TO CONTAINING COSTS WHICH SHOULD BE ENCOURAGED.

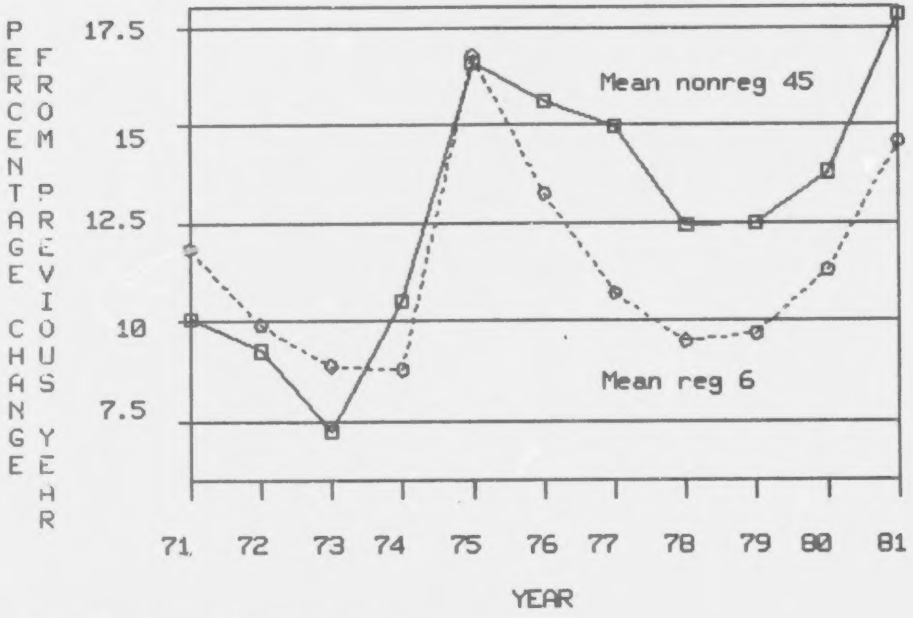
IN MANY RESPECTS THE LESSONS OF STATE RATE-SETTING ARE BEGINNING TO HAVE THEIR IMPACT. AFTER MUCH ADO, THE FEDERAL GOVERNMENT IS NOW COMMITTED TO PROSPECTIVE PAYMENT -- THE SYSTEM ENGINEERED UNDER STATE RATE-SETTING. THE GOVERNMENT ALSO CONTEMPLATES PAYMENT ON A CASE-MIX BASIS, AGAIN, AN APPROACH INVENTED BY STATE RATE-SETTING. BUT, THE GREATEST OF THE LESSONS IS BEING RESISTED, AND THAT IS THAT THE STATES HAVE SHOWN REMARKABLE COMPETENCE IN DEVELOPING A WORKABLE SOLUTION TO THE PROBLEM OF INFLATION. LAST YEAR'S TAX EQUITY AND FISCAL RESPONSIBILITY ACT IS DOWNRIGHT HOSTILE TO CONTINUED STATE EFFORTS TO REGULATE THEIR HOSPITAL INDUSTRIES. AND IT IS IRONIC THAT THE ADMINISTRATION WHICH CAME TO WASHINGTON IN PART ON THE PROMISE OF RETURNING POWER TO THE STATES, COMMITS THE SAME GRAVE ERROR OF SO MANY IN WASHINGTON OF ASSUMING THAT THE STATES ARE NOT ABLE TO MAKE AND EXECUTE PUBLIC POLICY. IT IS A BATTLE OF IDEOLOGY IN WHICH AN EMBRACE OF THE COMPETITIVE SOLUTION TO HOSPITAL COST INFLATION WINS OUT OVER STATE ACTION MERELY BECAUSE THE LATTER HAS BEEN BRANDED AS REGULATORY. THE SENSE OF IRONY IS HEIGHTENED BY THE FACT THAT THE TEFRA PROSPECTIVE PAYMENT/CASE-MIX METHOD OF FINANCING CARE IS REGULATORY IN EVERY RESPECT.

IF THERE IS ONE THING THAT I WOULD ASK OF THE COMMITTEE IT IS A CAREFUL CONSIDERATION OF STATE EXPERIMENTS AND THE PROTECTION OF THE ABILITY OF THE STATES TO CONTINUE THE DEVELOPMENT OF RESPONSIBILITY FOR THEIR HOSPITAL SYSTEMS.

Figure 1

PERCENTAGE CHANGE IN

EXPENSE PER ADMISSION (ADJUSTED)

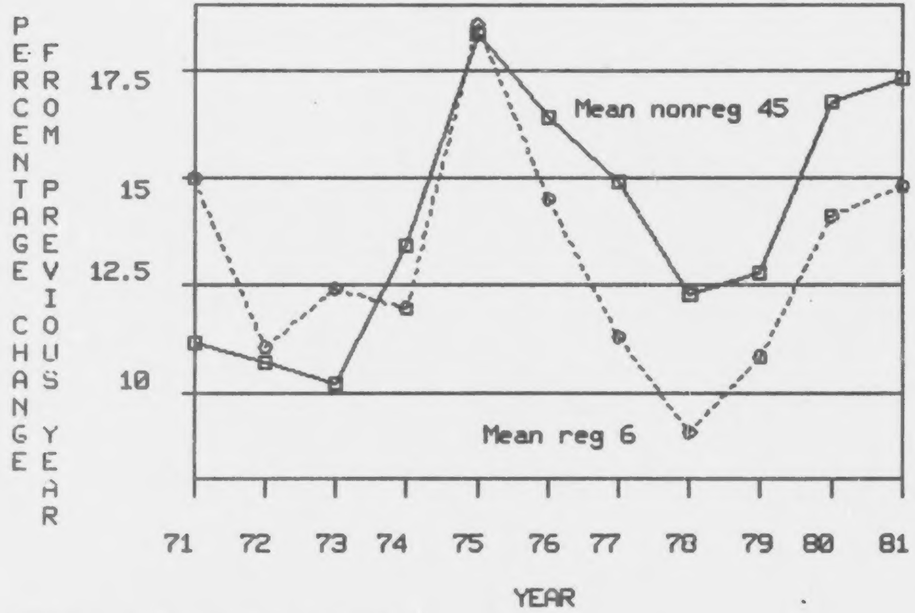


THE CENTER FOR HOSPITAL FINANCE & MANAGEMENT
The Johns Hopkins Medical Institutions

Figure 2

PERCENTAGE CHANGE IN

EXPENSE PER CAPITA



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APPENDIX 1

TABLE 5

TRENDS IN MARYLAND HOSPITAL FINANCIAL STATUS

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	ANNUAL PERCENT GROWTH
BALANCE SHEET												
1 AVERAGE AVAILABLE BEDS	10499	10738	11018	11024	11214	11381	11737	11856	12333	12578	12613	1.85
2 CURRENT RATIO	1.61	1.60	1.77	1.77	1.64	1.62	1.54	1.56	1.51	1.50	1.62	0.06
3 CUR ASSETS/TOTAL ASSETS	0.20	0.21	0.22	0.21	0.22	0.23	0.23	0.23	0.22	0.22	0.23	1.41
4 UNREST FUND BAL/ASSETS	0.67	0.67	0.66	0.63	0.62	0.60	0.55	0.52	0.48	0.46	0.43	-4.34
5 TOT FUND BAL/TOTAL ASSETS	0.70	0.68	0.68	0.65	0.64	0.61	0.57	0.54	0.49	0.47	0.44	-4.54
6 LONG TERM DEBT/GROSS PPE	0.21	0.21	0.21	0.26	0.25	0.26	0.31	0.34	0.39	0.40	0.48	8.62
7 LONG TERM DEBT/NET PPE	0.29	0.28	0.30	0.37	0.36	0.38	0.46	0.50	0.57	0.59	0.70	9.60
8 UNRESTRICTED ASSETS/BED	39.17	42.12	43.87	49.02	50.81	55.45	61.39	68.32	77.54	85.03	97.19	9.51
9 TOTAL ASSETS/BED	45.56	46.79	48.47	53.41	55.94	60.98	68.26	74.98	84.94	89.63	100.33	8.21
10 LT DEBT/TOTAL FUND BAL	0.24	0.25	0.26	0.34	0.34	0.37	0.45	0.54	0.68	0.75	0.92	14.38
11 GROSS PPE/BED	36.19	38.65	40.38	44.71	48.07	54.17	57.34	64.07	72.05	78.49	85.92	9.03
12 FUND BALANCE/BED	26.39	28.23	28.97	30.85	31.75	33.39	33.96	35.84	36.90	39.46	41.71	4.68
INCOME STATEMENT												
13 OPER EXP TO OPER REVENUE	1.00	1.00	0.99	1.00	1.00	1.01	1.00	1.00	0.99	0.99	0.99	-0.10
14 OPER EXP TO TOTAL REVENUE	0.98	0.98	0.97	0.98	0.98	0.99	0.99	0.98	0.98	0.98	0.97	-0.10
15 OPERATING MARGIN	-0.17	0.30	1.00	-0.15	0.01	-0.50	0.04	0.44	0.51	0.89	0.86	
16 TOTAL MARGIN	1.84	2.43	2.95	2.38	2.05	0.90	1.39	1.73	2.18	2.43	2.83	4.40
COMBINED												
17 OPERATING REVENUE/ASSETS	0.70	0.77	0.84	0.81	0.87	0.96	0.99	0.99	0.95	0.96	0.95	3.10
18 TOTAL REVENUE/ASSETS	0.71	0.78	0.86	0.84	0.89	0.97	1.01	1.00	0.96	0.98	0.97	3.17
19 OPERATING REV/NET PPE	1.01	1.13	1.28	1.27	1.33	1.43	1.58	1.55	1.47	1.52	1.59	4.64
20 TOTAL REVENUE/NET PPE	1.03	1.16	1.30	1.30	1.36	1.45	1.60	1.57	1.50	1.54	1.62	4.63
21 OPER REV/LONG TERM DEBT	3.61	4.01	4.25	3.41	3.71	3.82	3.45	3.09	2.59	2.57	2.26	-4.58
22 TOTAL REV/LONG TERM DEBT	3.69	4.10	4.34	3.49	3.78	3.88	3.49	3.13	2.63	2.61	2.30	-4.62
23 WORK CAP/DAILY OPER REV	39.72	37.31	41.64	41.07	35.54	32.76	30.16	30.46	28.69	28.45	30.88	-1.87
24 CUR ASSETS/DAILY OPER REV	104.95	99.04	95.42	94.49	91.00	85.95	85.83	85.10	84.66	85..3	86.30	-1.94
25 CUR ASSETS/DAILY TOT REV	102.97	96.98	93.60	92.17	89.18	84.77	84.70	84.02	83.27	83.95	84.62	-1.93
26 CUR LIAB/DAILY OPER EXPEN	68.25	64.72	56.89	55.73	57.83	54.98	57.79	56.89	58.44	59.48	55.93	-1.96
27 OPER REVENUE/FUND BALANCE	1.04	1.15	1.27	1.29	1.40	1.59	1.80	1.88	1.99	2.07	2.22	7.88
28 TOT REVENUE/FUND BALANCE	1.06	1.17	1.30	1.33	1.42	1.62	1.82	1.90	2.02	2.10	2.26	7.86
29 EXCESS OF REV/FUND BAL	0.02	0.03	0.04	0.03	0.03	0.01	0.03	0.03	0.04	0.05	0.06	11.61
30 COMPOSITE AGE OF PLANT	7.22	7.27	7.04	7.74	8.20	8.55	8.52	8.78	8.18	7.95	8.09	1.14

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STATE OF MARYLAND

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For release 1:00 p.m.
February 2, 1983

PRESS RELEASE

For the seventh year in a row, the cost of a day of hospital care in Maryland rose at a rate well below the National average, according to David Scheffenacker, Chairman of the Health Services Cost Review Commission, the state agency which regulates hospital rates.

The Commission's annual disclosure revealed that cost per day rose 14.2% in Maryland last year, while the National average was 17%. Based on these figures, the Commission said, Marylander's saved an estimated $39.5 million in hospital costs in 1982. An estimated $374 million has been saved since the Commission began regulating hospital costs in 1974.

Mr. Scheffenacker congratulated Maryland's hospitals for their relative performance in holding down the rate of increase in the total cost of going to a hospital. "Patients don't care about their individual charges nearly as much as about the size of their total bill," he said. The national rate of increase in cost per admission was

16.7% while the Maryland increase was 12.1%, a $68.3 million savings.

Commissioner Virginia Layfield, an executive at Peninsula General Hospital in Salisbury, Maryland pointed out that the national rates of increase were provided by the American Hospital Association and reflect data for all states including Maryland and the other regulated states. While state specific data will not be available until November, she explained that if the trend for the past six years holds, the rate of increase for the unregulated states was probably 1% higher than the national average. Thus, the savings, if based upon comparisons with unregulated states, would be about $15 million more, or over $80 million given the number of admissions to Maryland's hospitals.

Carl Schramm, an economist and lawyer who is Vice-Chairman of the Commission has published considerable research showing that the savings garnered by Maryland's hospitals are substantial and continuous. Nevertheless, he struck a note of caution and noted that Maryland's aggregate hospital expenditure rose by 14.3% while personal income and general inflation rose at rates less than half that amount. Thus, he said, "The level of hosptial costs we have now is less affordable than the cost level we had a year ago. Many Marylanders simply cannot afford the $2,782 average charge for going to the hospital." Professor Schramm, a member of the faculty of the Johns Hopkins University, said he would have "given the unregulated hospital industry an 'F' for their cost performance last year." He noted that while Maryland's hospitals "deserve a 'low B or high C', the people of the state can only afford 'A' performance."

Commissioner Don Hillier stressed that as an industry, Maryland's hospital gross patient revenue grew by $230,000,000, a 15% increase. He said, "virtually any other industry, and certainly any other social program would have gladly accepted that amount of growth." He cited the recent hearings regarding Blue Cross rate increases and the recently announced pre-admission certification program of many large employers in the State as evidence that business and non-business consumers alike are having difficulty affording hospital cost increases.

John Parran pointed out that the disclosure showed the effects of these concerns regarding affordability. Hospital gross revenues rose 14.9% last year while costs rose 14.3%. Thus, the Commission's system permitted hospitals to increase their profit margins. Yet, because of patients' inability to pay those charges, net income rose less rapidly than costs and the industry's profit margin fell from $10,300,000 to $2,800,000. This was because bad debts rose by over 24% from $83,000,000 to $103,000,000. Commissioner Parran, from Southern Maryland, stressed that bad debts have been increasing throughout the state. He pointed out that had the state's bad debt rate remained at 5.2%, hospitals would have collected $8 million more and improved their profit level.

Commissioner Roland Smoot, a Baltimore City physician, pointed out that due to current economic conditions and government fiscal policy, funding was being reduced or not sufficiently increased for the more efficient providers of primary care such as private physicians and clinics. The increased dependence upon hospitals makes the system less affordable, less efficient and threatens the solvency of hospitals through its increasing bad debt. Dr. Smoot said, "People burdened with illness and a huge inpatient bill cannot also afford the waste associated with an unpaid, inefficient outpatient care delivery system."

Chairman Scheffenacker, on behalf of the entire Commission, again congratulated Maryland's hospitals for "so soundly outperforming the rest of the country in controlling cost per admission." Speaking for a unanimous Commission, the Chairman asked Maryland's hospitals to seek innovative relationships with clinics and private practitioners which would improve access to affordable, high quality care while improving the solvency of all parts of the health delivery system. The Commission, he said, wants proposals which would make a proportion of currently approved hospital operating and bad debt dollars available for non-hospital outpatient settings. Such proposals should increase quality through continuity of care and improve access as well as increase the affordability and solvency of all participants.

III

STATE OF MARYLAND

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For release 1:00 p.m.
February 2, 1983

DISCLOSURE OF
HOSPITAL FINANCIAL AND STATISTICAL DATA

David P. Scheffenacker, Chairman of the Maryland Health Services Cost Review Commission (HSCRC), today released annual figures showing Maryland hospitals' performance during their last fiscal year.

In its annual disclosure of hospital costs, the Health Services Cost Review Commission revealed hospitals in Maryland held the increase in cost per equivalent inpatient day (EIPD) to 14.18%. The estimated national rate of increase in 1982, according to statistics produced by the American Hospital Association, was 16.99%. Viewed from the perspective of cost per day, this comparatively good performance would yield savings totalling $39.5 million.

However, the Commission has continually maintained that the public is not particularly interested in cost per hospital day, but in the total cost for being treated in the hospital. A patient gets little satisfaction from knowing that daily costs rose less rapidly if the total cost of their treatment includes more days of care.

From the perspective of the increase in cost per equivalent admission, Maryland's hospitals performed much better than the national average. Maryland's cost per admission rose 12.09% compared to the national rate of 16.73%. The savings to Marylanders from this perspective was $68.3 million. The difference in the rate of inflation in cost per admission and cost per day occurred because the nation exhibited a stable average length of stay while Maryland showed a decrease. Decreases in length of stay, when adjusted for changes in case mix, usually indicate more efficient treatment of patients.

This is the seventh year in a row that the Health Services Cost Review Commission's disclosure report has demonstrated that the percentage increase in hospital costs in Maryland has been lower than the rest of the nation. Last year's disclosure report indicated that hospital cost increases in Maryland were approximately two percentage points less than the national average in 1981 in terms of cost per day. The Health Services Cost Review Commission was the first hospital rate review agency in the United States to regulate rates for all those who purchase hospital care. The Commission began regulating hospitals in 1974 and has since assisted Maryland hospitals in remaining well below the national level of hospital cost increases. Had cost per day since Fiscal Year 1975 risen at the national rate, Fiscal Year 1981 expenditures would have been $2,025,337,000 rather than $1,650,828,000 or $374 million more. This is a cumulative savings of approximately 22.6%.

Equivalent Inpatient Days (EIPD) is a statistic formulated by the Health Services Cost Review Commission which equals inpatient days plus an adjustment to include outpatient visits. Equivalent Inpatient Admissions (EIPA) makes a similar adjustment on an admission basis.

An examination of the new financial disclosure reveals the following:

1) The average cost per EIPD in Maryland increased 14.18% from $279.75 in 1981 to $319.42 in 1982.
2) The average cost per EIPA (equivalent admission) increased 12.09% from $2,336 in 1981 to $2,619 in 1982.
3) The average charge per admission increased 13.32% from $2,455 in 1981 to $2,782 in 1982.
4) Total net profits of Maryland's hospitals have decreased from $9,024,039 in 1981 to $2,801,300 in 1982.

Clearly, this data - which have been derived from the hospitals' independently audited financial statements - indicate that Maryland hospitals have coped with inflation much more effectively over the last seven years than have hospitals elsewhere. At the same time, the Health Services Cost Review Commission's reimbursement methods allow the hospitals to benefit from the savings generated by their efficient operations.

Another unique feature of the Maryland hospitals reimbursement system is its coverage of the reasonable charity and bad debt expenses incurred by hospitals. In 1982, Maryland hospitals incurred approximately 5.7 cents of charity and free care expenses for every dollar of total operating cost. More than 89% of the statewide charity and free care expenditure of $92 million originated in the state's metropolitan areas.

The Maryland Health Services Cost Review Commission (HSCRC) was established by the General Assembly in 1971. It is an independent Commission within the Department of Health and Mental Hygiene. It consistes of seven members interested in health care problems and appointed by the Governor. The Commission's rate review authority includes assuring the public that (a) a hospital's total costs are reasonably related to the total services rendered; (b) a hospital's aggregate rates are reasonably related to its aggregate costs, and (c) rates are set equitably among all purchasers of care.

SOUNDING BOARD

THE TEACHING HOSPITAL AND THE FUTURE ROLE OF STATE GOVERNMENT

In the decade ahead, medical education in the United States will be governed more than ever before by inflexible economic imperatives. In the past century economic imperatives were overshadowed by reforms that centralized the education of physicians in universities and their teaching hospitals, by the advent of sophisticated and successful surgical intervention, by the development of a scientifically based and powerful materia medica, and finally, by an extraordinary dependence on technology in diagnostic medicine. At each stage, society was willing to commit the needed resources, and each stage yielded dramatic returns. Public faith in medicine as a force in preserving and extending life and restoring health grew concomitantly. In fact, the entitlements of Medicare and Medicaid may be read as a commitment to secure equity in access to what society now regards as medical necessities.

Ever since 1965, our society has been shifting its wealth to health and medicine at the expense of other social enterprises. However, the public's faith in medicine is being offset by a growing disenchantment with the way in which it is organized and financed. The absence of appreciable economic growth will cause us to question how our collective resources are to be distributed in the years ahead, and medicine may well be a net loser in this process. Such concerns will constrain the entire health-care system and affect academic medical centers in particular.

This paper examines why the economic pressures currently faced by most hospitals will place disproportionate stress on the teaching hospital in the years ahead. The growth of state government as a force in the survival of these hospitals is explored, and arguments are advanced to explain why such a development might be welcomed and even encouraged by academic institutions.

The Economic Trends

Not only inflation but also a shift in the distribution of collectively controlled national resources underlies much of the current sense of crisis in health care. As late as 1950, only about 4.5 per cent of the gross national product went to the health sector, of which a quarter came from public expenditures.[1] Except in municipal hospitals and state mental facilities, the provision of inpatient services was almost entirely in the hands of private and voluntary institutions. Health insurance as well was almost entirely in the private sector and was limited in both scope and depth of coverage. There was little governmental scrutiny of the ways in which health-care resources were allocated and used.

The 1946 Hill–Burton Act initiated a profound change in this constellation. During the next two decades, public expenditures for health care increased to 40 per cent of total health-care expenditures,[2] and government involvement centered on the closely related issues of access to care and the financing of medical services. Moreover, Medicaid and Medicare, the products of this involvement, became major forces in shaping medical education and the institutions responsible for it. The teaching hospital was suddenly being paid for its services to the poor. The problem of chronic operating deficits disappeared from the trustees' agenda; administrators could renew their physical plant and assume a steady flow of capital. Moreover, the surge of demand for care moved the government to encourage the training of more physicians and allied health personnel.

However, by the late 1970s, the shining promise of equitable access had been tarnished by the seemingly uncontrollable costs of these programs. As health-care costs rose from less than 0.5 per cent of the federal budget in 1964 to 10 per cent in 1981, they had to be financed at the expense of other government programs, such as defense, transportation, and education. In the private economy, the increasing cost of providing health-insurance coverage relative to other costs has reduced the resources available for both capital investment and the purchase of consumer goods. In short, substantial wealth has drifted into the health-care sector and away from other areas.

Such shifts can easily occur in a dynamic, unplanned economy such as ours. However, they also produce political tensions, for while some social enterprises are growing, others must contract; in our case, since 1963 federal expenditures for health care have grown at the expense of defense spending. Such shifts of resources among public sectors are particularly troublesome when economic growth is slower than expected or than necessary to sustain expenditures. This is the case today. The annual growth rate of the economy exceeded 4 per cent during the 1960s but is currently around 1 per cent. This lower rate of growth has been exacerbated by an average inflation rate of 7 per cent for the past decade and higher costs of capital, compounded by health-care costs that have risen faster than costs for all other goods and services — by about 15 per cent per year in the past two years.

The impact of these trends on federal and state budgets is clear. Whereas the entire federal budget is projected to increase over the next five years by 53 per cent in current dollars, government expenditures on health care are projected to grow by a remarkable 88 per cent. Many state budgets have experienced similar extraordinary pressures from their Medicaid commitments. Even clearer are the unmistakable signals that both state and federal governments intend to control this drift of their resources to health care.

The Teaching Hospital and Government Influence

The political and economic reallocation of societal priorities spells a relatively less prosperous future for all institutional providers, and the teaching hospital

Reprinted from the *New England Journal of Medicine*
308:41-45 (January 6), 1983

will feel the impact of changing government policy acutely. Many of the cutbacks will not be neutral with regard to the teaching hospital, which is also less able than other institutions to respond to current trends, whether to the incentives that would accompany a competitive future or to new constraints under intensified regulation.

With regard to the first trend, the teaching hospital is not well positioned to develop a competitive strategy for the presumptive emerging free market in health care. Almost without exception, teaching hospitals are located in historically poor sections of large metropolitan areas. The indigenous population was an attraction to the placement of such institutions 100 years ago but now represents a potential liability. Under most competition proposals, the net hospital revenue attributable to Title 19 beneficiaries will be less than present Medicaid payments, which even now are barely adequate to cover the costs incurred in treating such patients. Community hospitals will certainly not pursue this patient population enthusiastically. The teaching hospital will be left with the responsibility but without the resources for their care.

Furthermore, teaching hospitals are in a disadvantageous competitive position because of their size, which, in turn, is linked to their special mission. As tertiary-care centers they must operate with sufficient bed capacity for large numbers of special-care patients. This has always been viewed as the necessary clinical milieu for the physician in training. Although definitive data on the economies of scale in hospitals do not exist, informed opinion suggests that the sheer size of the average teaching hospital makes it operate with diminishing returns in relation to size.

Linked as well to the special mission of the teaching hospital is the cost of medical education, which is intimately tied to patient care. As Donald Cohodes, an expert on hospital finance, put it, "attempting to isolate the costs of graduate medical training from those of patient care is like trying to unscramble an egg." Whatever competition scheme one imagines, if price is the focal point of consumer choice among hospitals, the teaching component of the university medical center constitutes an insurmountable handicap in the market.

There are additional factors that restrict the teaching hospital's market behavior. Despite endowment capital, the teaching hospital has limited financial reserves. Because of its size it cannot easily acquire competing hospitals without risking antitrust litigation. It cannot organize a service population around a fixed-price coverage contract without entering into the insurance business and directly challenging Blue Cross and commercial carriers. It cannot easily become the core of a health-maintenance organization because the teaching hospital's catchment population contains relatively large numbers of high-risk patients who would make a health-maintenance organization without public subsidy a questionable undertaking. Indeed, to the extent that the teaching hospital is charged with a disproportionate burden of caring for the poor and to the extent that its prices must reflect teaching costs, its ability to operate as a competitive entity in the short run is almost negligible.

The regulatory side of the argument does not offer much brighter prospects. Teaching hospitals provide more days of care to both Medicaid and uninsured patients than do other U.S. hospitals.[3] Whereas teaching institutions constitute only 5.6 per cent of all hospitals, they account for over 40 per cent of all charity and bad-debt care incurred by hospitals in this country.[4] In addition, they derive about one third of their revenue from Medicare patients, for whom routine costs of care have been tightly controlled by the federal government since 1976 and for whom even ancillary costs will be regulated in the near future under the terms of the Tax Equity and Fiscal Responsibility Act of 1982.[5] This new statute expressly disallows several of the costs associated with the operation of teaching hospitals. Given that reimbursement for the Medicaid and Medicare populations is the most direct burden on the public, and that the most refined and powerful regulations relate to these two programs, the teaching hospital can be expected to suffer disproportionately as regulatory pressure continues to increase.

The National Center for Health Statistics 1979 estimates for the nation's short-term general hospitals confirm that on the average, about 12 per cent of their anticipated revenue (in terms of patient-days) was from patients on Medicaid and from uninsured patients.[6] For six major university teaching hospitals in the East and Midwest (average size, 922 beds), Medicaid and uninsured patients accounted for 25.7 per cent of patient-days in 1980 but provided only 18 per cent of actual revenue, mainly because of bad debts (Table 1).

A final point to be made regarding the tenuous fiscal outlook of teaching hospitals is that they do not generally enjoy the broad and politically powerful local government support that often shelters the community or nonprofit hospital; the medical elite who worry over the fate of the teaching hospitals may, in fact, constitute a political liability. There are many who consider hospitals with teaching programs to be the site of profligate practice patterns that should be a special target for cost containment.

STATE INITIATIVES IN FINANCE REFORM

Continued action to contain hospital and related costs is inevitable. Consumer prices in calendar year 1982 rose at a rate of approximately 6 per cent per annum, indicating that most markets were indeed responsive to the reduced demand and pressure on expenditures that accompany a recession. But hospital costs for the same period rose at well over twice this rate.[7] Thus, despite the 1981 Budget Reconciliation Act[8] and the more stringent Tax Equity and Fiscal Responsibility Act of 1982,[5] which will purportedly yield Medicare savings of $13.3 billion and Medicaid savings of $1.1 billion over the next three years, more

Table 1. Percentage Distribution of Sources of Income for All Short-Term Hospitals (1979) and Selected Teaching Hospitals (1980).

SOURCE OF PAYMENT	ANTICIPATED REVENUES BY PATIENT-DAYS		ACTUAL REVENUE FOR SELECTED TEACHING HOSPITALS
	ALL U.S. HOSPITALS *	SELECTED TEACHING HOSPITALS †	
Private insurance	42.9%	38.8%	40.4%
Medicare	39.9	32.7	33.7
Medicaid	7.7	17.4	15.2
Uninsured	4.5	8.3	2.8
Bad debts	—	—	(5.1) ‡
Other §	5.0	2.8	2.8
Totals	*100*	*100*	*100*

*Data from Pokras and Gardocki.[7]

†Data obtained by the author from six university hospitals (Brigham and Women's, Boston; University of Chicago; Johns Hopkins, Baltimore; University of Iowa, Iowa City; Montefiore, Bronx; and University of Wisconsin, Madison).

‡Negative revenue, or the amount of bad debt relative to collected revenue.

§Such as charity and workers' compensation.

aggressive federal action is expected to reduce the rate of spending in the hospital market.

State governments are likely to act as well. They are subject to the same budgetary pressures felt by the federal government through their Title 19 obligations. These pressures will be even more acute for the states because of their constitutional prohibitions against deficit financing. Moreover, state initiatives to cope with rising health-care obligations will not be met with the same resistance from the federal government that was seen in the past; indeed, recent federal legislation encourages state action. This change in perspective has been occasioned by several factors.

In the first place, increased state activity is consistent with the historical commitment to the federal system repeatedly affirmed in contemporary Republican philosophy. Secondly, the diversity of need for action from state to state makes the apparently impossible task of developing a unified national policy unnecessary. Oil-rich states in the Southwest, with state resources adequate to meet their relatively small Medicaid obligations, are not as likely to cheer increased federal regulation or federal takeover as the fiscally fatigued states in the Northeast that are desperate to reduce their comparatively liberal health-care commitments. Thirdly, recent evidence suggests that at least some state experiments have been successful in controlling the rates of hospital-cost inflation without affecting quality of care or the fiscal health of the hospital industry. Data published in 1980 showed that the six states with hospital rate-setting agencies experienced annual increases in the cost of a hospital case that were 4 per cent below the national average case cost over a four-year period.[9] Whether such past success can predict the future is hard to tell, but it is a force to be reckoned with. Finally, and of particular importance to the teaching hospital, budgetary constraints have prevented the federal government from supporting experimental and demonstration programs designed to reduce costs. The demise of both federal planning and professional standards review organization programs and the massive cuts in funds for health-services research bear witness to this stark reality. As federal support for experimentation has diminished, so too has federal influence, and state officials are responding to the absence of federal direction by developing their own approaches.

The conclusion seems inescapable that state activity will continue to be of immense importance to the teaching hospital. The following two examples will illustrate current state-level approaches to two problems besetting the teaching hospital, large uninsured patient populations and Medicaid costs. In early July, the New York State legislature passed a bill providing $430 million over three years to hospitals to make up for the bad debt incurred by patients without any means of payment.[10] Drafted largely with the disproportionate burden borne by New York's teaching hospitals in mind, this plan attempts to establish a mechanism for shielding hospitals from the risk of bad debt. In June, far less benevolently, the California legislature vested in a new agency the power to bargain with providers for exclusive service contracts covering Medi-Cal patients.[11] The legislation directs the state to seek the lowest-cost providers and confers the authority to set Medi-Cal rates for providers who do not reach agreements with the state. Thus, because of their relatively high costs, many teaching hospitals may well be found ineligible for contract participation and lose a sizable proportion of their patients to less expensive hospitals.

Given these two approaches to the financial problems of teaching hospitals, it seems prudent for these hospitals, whether they are privately or state owned, to anticipate both sympathetic and hostile executive and legislative interest at the state level and to devise strategies appropriate to the new policy environment.

The first step is acceptance of a legitimate and inevitable assertion of state interest. In addition to the predominant concern over Title 19 expenditures, a link between increased state interest in health care and growing concern over the issue of physician training can easily be foreseen. The market for physicians may be filling up rapidly, and this will cause a major problem for state government. Physicians denied practice privileges in hospitals already fully occupied will increasingly seek judicial remedies that will test the theories on which the state's authority over licensing is predicated.

Accompanying this debate, which is already breaking out in state appeals courts,[12] will be a growing concern over the state's commitment to medical training, particularly in states that support large medical-education programs. In these states, the fortunes of the university hospital and the medical school have always been linked, with budget increases for the one being justified by the existence of the other. As state legislatures rethink their commitments to physician training and are called on to reduce the size of medical-school classes, the university hospitals will have lost one of their arguments for continued growth and funding.

More important for the immediate future, teaching hospitals may well find attractive several pragmatic aspects of state interest in hospital finance. By its nature, concern over hospital financing at the state level is well suited to what are in fact localized markets in which the organization of hospitals and the social culture of medicine vary widely. The pluralism of state approaches thus has clear advantages over federal guidance, which must be monolithic. Because state-level efforts can develop to meet the actual needs of smaller communities, they can essentially escape the philosophical labeling phenomenon that is endemic to national policy making. Pragmatic solutions may be advanced and accepted because of their potential for meeting the demands of numerous interest groups without coming up against the political difficulties that attend debates at the federal level. A further advantage of such state approaches is that experiments may be tried and adopted or discarded by one or more jurisdictions, thus accelerating the learning experience of the states and of the nation as a whole. Finally, a state policy apparatus that has run its course can be more easily dismantled than a federal bureaucracy.

In fact, teaching hospitals in the state of New York, with its new concern over the plight of hospitals with bad debts, as well as those in Maryland and New Jersey, will benefit or have already benefited from state rate-setting programs. The University of Maryland Hospital, Johns Hopkins, and the University of Medicine and Dentistry of New Jersey Hospital are all in sounder financial shape, and have operated or will operate without deficits, as a result of an aggressive state role in hospital finance.

Conclusions

State-level interest in the hospital will increase, whether it takes the form of formal regulatory systems or of financing schemes, such as fixed-amount contracts for patients eligible for Medicaid. It seems certain that this will particularly affect the fortunes of the teaching hospital. As noted above, the teaching hospital commonly has a greater load of both Medicaid and uninsured patients and, because of its educational mission, is less able than other institutions to respond to the incentives of a competitive environment. The scrutiny by state government of the fiscal problems of public and private academic teaching centers will take many forms and produce many responses. The teaching hospital should view these developments from a position of enlightened self-interest.

Since state health departments and hospital commissions will grow in importance from the perspective of the teaching hospital, it will be important that the legitimate differences in the services that such institutions offer are made clear to governors, legislators, and state secretaries of health. In several states where aggressive cost-containment programs are in place, year-end surpluses have steadily increased, bond ratings have improved, and financial status has strengthened. In Maryland, the regulatory agency has protected the state's hospitals from the risk of bad debt, which has had a particularly salutary effect on teaching hospitals. Similar systems exist in New Jersey and have been proposed for Massachusetts and New York. Indeed, the advent of state cost-containment agencies might be accepted by the teaching hospital in terms of a quid pro quo whereby discretion in price setting is given up in part for predictable budgets and sheltering from uncompensated care.

Experimental, creative, and mutually beneficial financing mechanisms may well be accepted by state governments. A prerequisite for this is that the medical and administrative leadership of the teaching hospitals recognize the shift in the locus of government decision making and act to forestall alternatives, such as the cost-containment system now enacted in California, that at best show indifference to the future of the teaching hospital.

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Senator CHILES. Dr. Meyer, I think we will allow each of you to testify, and then we will question you.

STATEMENT OF DR. JACK A. MEYER, RESIDENT FELLOW AND DIRECTOR, CENTER FOR HEALTH POLICY RESEARCH, AMERICAN ENTERPRISE INSTITUTE

Dr. MEYER. OK. Thank you, Senator.

If you have no objection, what I would like to do is, instead of reading my statement, simply submit it and briefly summarize it.[1]

Senator CHILES. We would appreciate that.

Dr. MEYER. I know you are pressed for time.

CAP TAX SUBSIDIES

It seems to me that medicare and medicaid reform need to be evaluated in the context of overall health policy reform, and it is important to start, I think, by noting we have three main subsidy programs, medicare, medicaid, and the tax subsidies which go primarily to middle- and upper-income households.

Those tax subsidies have been estimated by the National Center for Health Services Research at $31 billion for the 1983 calendar year.

To put that in perspective, that is roughly half the medicare program, at least as it is estimated for the fiscal year 1984 budget, and about 1.5 times as much as the Federal share of medicaid.

That means that we are spending 1.5 times as much on this program going primarily to middle- and upper-income citizens as we are for the primary program going to low-income citizens, which excludes millions of people below the poverty line.

I mention that because I think the first priority of policy is to cap these tax subsidies, and it would be a good idea, if possible, I think, to use some of the savings to help those who have no health insurance, and there are more and more of those every day, I might add.

It seems to me that two key problems with the system are the lack of choice in both the private and public sectors and the unlimited subsidies that we have—both the tax subsidies and the payment systems we have under medicare and medicaid.

We should judge reform proposals by their ability to get at these two problems. Similar research from the NCHSR indicates that 82 percent of Americans who buy their health insurance through the workplace have no choice of plans, and of those 18 percent that have choice, most of them have what I would call a biased choice. That is, their employer pays more on behalf of the high-cost plan than the low-cost plan.

It seems to me that to foster more choice we have to start by capping this tax subsidy that enables people to take a free ride on the full value of the employer contribution without limit.

When you have a situation with some workers in some industries whose employers are contributing nearly $300 a month and covering the second pair of glasses or orthodontia for their kids, that's fine if they want it, but not subsidized with the average person's tax dollars.

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[1] See p. 71.

PRESENT SYSTEM MOST DRACONIAN

Now, moving to medicare the previous speaker, I think, implied that the administration's proposals were Draconian. I would say that in the area of medicare benefit design, the most Draconian system we have is the present one, which has unconscionable cost sharing from people at the point at which they are the sickest.

Under the current system, as you probably know, as of the 60th day in the hospital, we begin to collect from people. After 59 days of a free ride. There is a deductible equivalent to the first day's cost.

Now, I would call that pretty Draconian.

It seems fair to me to ask for a measure of contribution at the "front end", and we could argue honestly about how large that measure should be. Perhaps the administration's proposal is a little too much too fast.

Institution modest cost sharing for relatively routine stays, or for short stays, and using that money to finance catastrophic protection, as the administration has proposed, is far from a Draconian approach, and I think that it is one that would not only be a better twist of benefits for the elderly, but also introduce some cost consciousness at a point when it makes sense to introduce some cost consciousness, rather than at such an unjustifiable stage.

Turning briefly to payment reform, which is my chief concern, I must say I differ greatly from, though with great respect for the previous speaker whose work I admire. But I am skeptical of the approach he outlines, and want to offer a different view.

It seems to me that the administration is offering in the medicare voucher plan a proposal that is not without problems, but has greater promise than the prospective system that we are seeing unfold before us now.

Why? Because like the tax subsidy cap I propose, the voucher begins to introduce the concept of choice, that there is no one kind of plan that is perfect for everybody. It begins to attach to that choice some financial rewards and penalties.

PROSPECTIVE PAYMENT SYSTEM TOO COMPLEX

The prospective payment system with its current incarnation of diagnostically related groups, which is the favorite right now at HHS, is well intentioned. It is so complicated that I think it will degenerate into a regulatory nightmare. The use of 467 prospective payments for what the government will deem 467 diagnostically-related groups, with wide variations in severity and complications within those groups, will spawn 467 more, in my view. Furthermore, not only is the system complex, but it is ironically incomplete, because it does not get at the problem of controlling physicians admissions to hospitals.

It is in a sense a perdischarge fixed payment ceiling that says, "Once you're in, we'll only pay this much for this case with this complication." By the way, in their documents, the administration refers casually and, quickly to a policy saying that "We will separate complicated from uncomplicated cases," as if that were a kind of nicely bimodal distribution.

It seems to me that this new DRG system addresses only one part of the problem; namely, that we have had an indefensible, retrospective cost base reimbursement. It is better to make that prospective, in a sense, but this step alone does not get at the lack of choice. It is a little bit like saying to a government employee, "You can still buy a Cadillac, but we are only going to give you $14,000, because we think you can get a Cadillac for that $14,000, and we're going to establish the principle that that's all there is for a Cadillac, there ain't no more."

Well, that's better than telling them to go buy a Cadillac at whatever it costs them to build, but I would prefer a system in which we said to them, "Look, we think you can get an adequate car—not a fancy car, but an adequate car, for $8,000. You go out and shop around, and you can find one for $12,000 that you like better and want to add $4,000 of your money, fine."

So, in short, I think that we need to avoid being dazzled by the complexity of this system. We need to be concerned that even though it is being sold as an improvement in incentives, it may turn out to be a very complex regulatory approach. I think that the advantage of the voucher system is that it would begin to bring the doctor admission rates into a hospital into the picture. Research has shown admision rates to be a large part of the cost problem, more important than any inefficiency once you get in there.

PESSIMISTIC ABOUT STATEWIDE PRICE CONTROLS

Let me close on that point by simply noting that I won't take Dr. Schramm on here about the evidence. He is more a part of that battle than I am, but I would say that there is some question in my mind as to what cost we pay for cost containment by that route, and I think there is evidence to show that only a few percentage points at most have been shaved from rates of increase in hospital costs in only a few States.

But, as he admitted, they are high cost States to begin with. They are the ones that were the furthest out of line. Maybe that's one of the ways we were able to bring them under control.

Second, I am not sure all variables are fully controlled, so in response to your question, Mr. Chairman, about whether all of even this few percentage point apparent reduction can be attributed to rate setting, I am not so sure.

I would suggest his results be read in conjunction with Prof. Frank Sloan's, Paul Joskow's, and others, who have all contributed to this field, and I think a balanced reading of the evidence would show small gains from rate setting, at best, and some cost to those gains. Finally, I would really take issue with the notion of an all payers approach.

I have to confess to you that I am something of a washed out government price controller in a prior incarnation, involved in those wage-price programs in the mid-1970's, and I came away from that experience very pessimistic about systemwide price controls.

Yes, we could devise an all payers system that made everybody follow the practice of medicare, which is paying hospitals less than it costs them to serve people.

We could have the Blues and the commercials in the market also get the exact same discounts, but that is going to result in a deterioration of services, it seems to me. If all payors follow the lead of medicare, refusing to pay what it costs to provide these services, you are not going to get the quality of services people want. Nor will you have any competition in the insurance marketplace.

And so it seems to me that extending medicare's chintziness, if you will, of not paying its share of the bill on a systemwide basis, is going to have troublesome side effects, and I suggest that those be weighed in with the apparent benefits of fiscal savings.

FLEXIBILITY FROM RIGID FEDERAL RULES NEEDED

Finally, I am not going to discuss medicaid, because that would be a separate subject, and I don't want to over-use my time. I will simply say that we need more flexibility from rigid Federal rules, and I would point to experiments going on around the country conducted by States, experiments of a different nature than the ones the previous speaker described.

I think we should look at both types of innovations. What is going on in his State is interesting. We at AEI are looking at prospective payment and rate-setting, but we are also evaluating primary care networks and case-management systems, and other kinds of initiatives being developed all across the country under waivers from HHS. These systems begin to put doctors at risk and begin to steer patients toward efficient providers, and I think that we need to review these initiatives and open up flexibility for all of them under Federal law, not just State rate setting.

Thank you.

Chairman Domenici. Thank you, very much.

Prepared Statement
of
Jack A. Meyer*

Mr. Chairman: Thank you very much for the opportunity to appear before this committee. Health care reform should be built around the following principles: (1) a system of sharing costs that encourages people to economize on the use of routine health services, while offering greater protection from the costs of serious illness; (2) federal aid to low income people that increases with increasing need, and vice versa; (3) fixed dollar instead of open-ended federal subsidies to aid those unable to purchase adequate health insurance; and (4) fair competition among alternative health care plans for the consumer's dollar. Incorporating these changes into government policy will require a major overhaul of federal programs.

These principles can be implemented through the following changes in government policy:

- o place a ceiling on the chief open-ended tax subsidy for health care -- the tax-free status of employer contributions to employee health insurance;
- o build protection against expenses associated with catastrophic illness into Medicare, combined with a greater measures of cost-sharing for routine services;
- o convert Medicare to a program of premium subsidies to be used for Medicare coverage or any qualified alternative plan;

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*The views expressed in this testimony are those of the author and do not necessarily represent those of the American Enterprise Institute, a nonprofit research and educational institution that does not take positions on public policy issues.

- continue the process of deregulation in areas such as certificate-of-need and flexibility for states under Medicaid;
- use existing antitrust law to encourage fair competition among alternative health care plans and providers;
- convert Medicaid to a system of sliding scale premium subsidies in which the very poor would be fully subsidized.

In its new FY 1984 budget, the Reagan administration has endorsed several of these proposed steps. The administration has proposed a tax subsidy ceiling, Medicare benefit redesign, and a voucher system for Medicare. None of these steps will be immediately politically popular and the administration deserves credit for proposing steps that, finally, are addressing the causes of our problems of health care financing instead of the symptoms.

My concern is that the Reagan administration -- and Congress -- will remain the prisoners of past policies, particularly by becoming ensnared in the implementation of the Tax Equity and Fiscal Responsibility Act of 1982 (H.R. 4961). The health care provisions of this legislation suggest that Congress has not yet confronted the real problems with our health care finance system. The three fundamental forces that have driven up the costs of health care are: (1) open-ended federal tax subsidies for the purchase of ever more comprehensive insurance, which inflates the demand for health-care services; (2) retrospective cost-based reimbursement of doctors and hospitals by both government and private insurers, which in effect rewards (and thus entrenches) inefficiency; and (3) ironically, government regulation itself, which tends to confirm the status quo, protecting those who provide too much helath care too expensively and impeding innovative efforts to lower costs.

In my view, only two of the many provisions relating to health care in this new legislation even begin to address these basic problems, and these two steps in the right direction need to be extended or modified significantly if they are to hold real promise of improving the efficiency of the system.

Prospective Payment

Prospectively-set rates or spending amounts may reverse some of the inherently cost-generating incentives associated with retrospective reimbursement, but are subject to other problems. Many prospective systems retain few elements of "prospectivity" once they are implemented and end up being tied to the same allowable cost system that has characterized federal reimbursement policy for years. Also, prospective payments to providers may put some ex ante pressure on each provider to cut costs, but may not encourage true economies as much as they lead to service cutbacks.

I am concerned that the federal government, after dragging its feet for years on developing a new reimbursement mechanism, is rushing headlong into a very complex DRG-type approach. Although this approach sounds promising, it is easier to describe a process of separating patients on the basis of diagnosis than to implement such a system. It seems likely that individual diagnostically-related groups will contain patients with widely differing needs (e.g., the severity of the condition may differ substantially), and such differences would be associated with widely-varying price tags. This will lead to a process of continuous refinements and appeals from hospitals that feel that the system has not adequately controlled for their particular case mix.

Furthermore, despite its complexity and detail, a DRG system is still, ironically, incomplete as a cost control mechanism. As long as hospital admissions are not controlled, a key loop remains to be closed. This is particularly problematic in view of the evidence suggesting that rates of hospital admission are much more important in explaining the cost advantage that pre-paid plans have over traditional health plans.

Hospital admission rates as well as the number and type of services performed are controlled by physicians, responding according to their training, their perception of patient expectations, and local practice patterns. The proposed DRG prospective payment system eliminates the perverse incentives of cost-based reimbursements, but it remains a highly indirect, tenuous way of getting at the main causes of hospital spending growth in excess of general inflation. In effect, it puts on hospital administrators the burden of controlling physician decisions.

Medicare Payments to HMOs

TEFRA modifies current law by authorizing prospective reimbursement under risk sharing contracts with competitive medical plans at 95 percent of the Adjusted Average Per Capita Cost (AAPCC). The new provision, in effect, would share savings associated with lower HMO costs between the federal government and Medicare enrollees who select an HMO.

Greater use of HMOs by the elderly may not do much to encourage overall health care cost containment: although HMOs have a cost edge at present, they may well have that edge because their members are younger and healthier than the average. A system of medical vouchers for Medicare patients might do much more, by allowing a variety of new health plans -- including case management or preferred provider organizations -- to compete with HMOs and the traditional Medicare plan for taxpayers' dollars. (Congress considered, but dropped a proposal of this sort in 1981-82.)

A Better Approach to Medicare Financing

Exclusive or even primary reliance on prospective payment, as the plan is now envisioned, would lead to little progress in the effort to contain the cost of Medicare without cutting benefits. In my view, the complex, yet incomplete, system of prospective payment could take its place next to certificate-of-need, PSROs, and rate setting as well intentioned, but ineffective strategies unless coupled with cost sharing, vouchers and structural tax reforms. The administration and Congress should place the array of complicated formulas and target rates for "allowable" increases specified under TEFRA on the back burner and move more promising new proposals to the front burner.

In my view both prospective reimbursement and the new HMO reimbursement policy need to be broadened and converted into a voucher system for Medicare. With this approach, beneficiaries would be given a voucher for the purchase of any qualified private health plan in their area. If the premium of the plan selected was lower than the voucher amount, the beneficiary would receive the difference in cash from Medicare, while those choosing plans with higher premiums would pay the extra amount themselves. The value of the voucher could vary according to factors such as age, sex, and local medical costs. The voucher approach would breathe life into the concept of prospective payment by including incentives to reduce admissions to hospitals and by broadening the range of alternatives to traditional fee-for-service medicine beyond HMOs. If we are going to test the concept of prospective payment, we cannot leave any major loopholes. And if we are going to couple this concept with the use of multiple choice, that choice cannot be constrained to include only the reigning champion (fee-for-service) and the best-known challenger (HMOs). As primary care networks (PCNs), preferred provider organizations (PPOs), independent practice associations (IPAs) and other "hybrids" with some of the features of both fee-for-service and HMOs continue to develop, we must not effectively shut them out of the Medicare market.

To the extent that competition among HMOs, PCNs, PPOs, Blue Cross, Blue Shield, and commercial insurers for the taxpayers' dollars yields lower costs for a given package of services, a voucher plan promises a way to meet the health needs of our growing elderly population in an environment of increasingly scarce federal dollars. It is important to note, however that a voucher approach would not yield immediate savings. In fact, there could be a small increase in outlays initially as the more cost-effective plans are reimbursed at a community-wide average level that exceeds their costs.

It would also be important to accompany a voucher program with a plan under which the government -- drawing upon private sector expertise -- screened plans seeking to serve the elderly and provided information about alternatives to beneficiaries.

We must be wary of regulatory fixes promising short-term savings. These false panaceas can drive into hiding more lasting cures that do not promise overnight relief.

Chairman **DOMENICI**. Could I ask you just one question?

Dr. **MEYER**. Yes, sure.

$165 CAP IS REASONABLE

Chairman **DOMENICI**. While the tax part is not the whole ball game, the budget the President sent over suggests a $165 cap on deductibility. Are you aware of that?

Dr. **MEYER**. I thought it was $175, but I may be wrong.

Chairman **DOMENICI**. $165 to $175 is reasonable?

Dr. **MEYER**. Yes, I think it is, very frankly. It would be possible to get more savings, of course, by lowering the cap. For instance at about $150, estimates prepared for our study indicated that you could save $5 billion instead of $3 billion, but I think you need to say, "Look, we want to introduce this change in the system gradually."

I think it is the kind of cap that would not touch most people who have a kind of basic or regular type benefit package. It would mainly touch people who have first-dollar coverage for all kinds of things, and benefits in the dental and other areas.

I don't mean to denigrate those benefits, but those kinds of extras, I don't have trouble with taxing, and I think it is a fair start. If you wanted to change it over time, if you found it wasn't tight enough, we could do that through the way the cap is updated for inflation.

Chairman DOMENICI. Just from our standpoint as Budget Committee members, all we would be looking at is whether or not the alleged savings of $3 billion is reasonable to expect by way of a revenue increase. We won't do $165 or some mixture thereof.

But maybe you already did this in your testimony. I didn't get a chance to read it. If it is $165; that is, averaged, measured against something in the country, what do you measure it against to make sure that we are treating working people, who are principally the ones here, and large groups of working people and, equally as important, large labor unions' memberships, how do we get a sense that $165 is fair?

CAP WILL INTRODUCE LONG-TERM DISCIPLINE

Dr. MEYER. Well, those are two very different comparisons, Mr. Chairman.

I think if you look at it against the average working person, you will find it is an amount considerably above what the average employer pays on behalf of his employees. If you look at it on the second comparison you mentioned, the average major labor union, you will find that a number of them have more generous packages with costs above this proposed cap.

For instance, I am told that in the auto industry, the employer contribution is approaching the $300 a month range. But, that is way above the national average, and they have become benefit rich.

I don't mean to suggest that that is not their free choice, but it is those kinds of packages I think we should begin to tax a little bit, and I believe very frankly if you said to a person whose employer is paying $250 a month, "Look, the extra $75 a month is going to be taxed," that person would say, "I would like to see what I could get for $175, with no tax bite" and then compare the two.

The idea of the tax cap is not to be vindictive, but to encourage choice, to indicate to people that they must sit down and compare the benefits under these plans. Hopefully, this will give those plans that do discipline providers, and that do restrict choice somewhat to the most cost-effective providers a chance to compete with those that don't. Under the current system if there are two insurers and one charges $250 and another $175, but the employee has the premium fully paid for by his employer either way, with no tax consequences, what does the worker care which one he buys?

And so the $250 plan is in the driver's seat.

So I think that this cap will introduce some long-term discipline.

Chairman DOMENICI. Senator Chiles?

Senator CHILES. Yes. Dr. Schramm, I would like to have your idea about what you think the administration's proposals are in regard to copayment: One, whether those are fair or not and, two, how will that affect your opinion, Dr. Meyer? What will that do to long-term care? What effect will that have on the care itself?

These are pretty large increases right now. I think we are talking about an average hospital stay, an average stay going from $300 to $900 would be the contribution.

Dr. **Schramm**. Senator, I think it is proper to pose it first of all in terms of fairness, and then I think you must explore what it will do in terms of the system.

To increase copayment, the fundamental theory is, can be one of two things. One, it is either revenue enhancement or, second, it is market discipline, as I think Dr. Meyer pointed out.

WEALTH-SENSITIVE SYSTEM

Now, the fairness question is a concern that I think both he and I would share. Where does it fall? Is it proper to put it at the front end, or proper to put it at the back end, and so forth.

My own sense is that it is proper to introduce a wealth-sensitive system from the individual's perspective, that encourages through a copayment mechanism, more careful consideration of the costs of the provider about to be chosen.

I think that is a proper thrust of public policy, and one that encourages the consumer to be more considerate of the risks and financial costs to be borne, and to be more careful about choosing things and also to establish more incentives over the providers to be more cost efficient.

FUNDAMENTAL INSTITUTIONAL PROBLEMS

On the other hand, I do not think, and implicit, I believe, in Dr. Meyer's remarks—he speaks about plans that discipline providers—I do not think you can overlook the fact that merely working on the revenues, hospital revenues, or in this case actually secondarily through putting the individual patient at risk and hoping for a secondary impact on hospital discipline, I do not think you can overlook the fact that we have fundamental institutional problems which must be dealt with by government at some level.

And those fundamental institutional problems are profligate practice, hospitals that are run without any semblance, in many instances, of a concern over efficient operation, and I would suggest to you that as quasi-public institutions, as regulated professions, it is proper for government to directly, and I believe the budget pressures are such that we cannot eventually avoid, directly guiding and helping and assisting hospitals, basically by establishing budget constraints and regulatory guidelines and incentive-based regulation, which contemplates the all-payer system.

I think it is important for Government to step up to that question and face it fairly.

Senator **Chiles**. Dr. Meyer?

SCALING COST SHARING TO INCOME

Dr. **Meyer**. Well, I think there is a lot to be said for scaling cost sharing to income in this and other programs, and I do worry about the impact of sharp increases in cost sharing on the low-income elderly.

On the other hand, there are a significant portion of the elderly whose incomes are above $20,000 who could probably afford to contribute somewhat more.

I did some calculations that showed that the administration's proposal, which would charge the elderly 8 percent from the 2d to 15th day, and 5 percent of the 16th through the 60th day, could amount to about $1,180 in increased cost sharing before the stop loss kicks in.

That might be too much.

It is a working proposal on the table. Maybe we would only want to change 5 percent from the 2d to the 15th day and stop there. I do think we should depart from the current system where you pay one day and then nothing, and I think there is a lot of ground in between.

BE MORE COST CONSCIOUS ABOUT INSTITUTIONAL CARE

Let me just respond briefly to your second point about long-term care. We handle that mainly through the medicaid program and long-term care has now become 42 percent of medicaid's expenditures, but there is a curious twist to our reimbursement.

It seems we will pay almost anything for care in an institutional setting, usually a nursing home, and virtually nothing for care in a noninstitutional setting.

I think in the interests of both cost control and the dignity of the recipient, we need to relax this and maybe be more cost conscious about institutional care, whether you follow Dr. Schramm's type approach or mine, or some amalgamation of the two—I don't want to be purist about that—but change the reimbursement system.

You have situations where there are people well enough to be out of the hospital, but they may need a therapist or a nurse to look in on them once or twice a week. If they could be reimbursed for that and get out of the hospital, they might not have to go from hospital to mursing home. That could save a large amount of money and also would be a lot better for them.

So I think we need to take a whole new look at our approach, because in the long term we are not going to be able to afford the institutional bias in long-term care, given the demographic trends.

Senator CHILES. Given the fact that we have Medigap insurance, I understand at least two-thirds of the elderly are sort of covered now, and have supplementary insurance policies that cover copayments. How do you expect those people to pay who don't have that much of a stake in the hospital costs, if they have got the medigap coverage?

I would like to have your view on that, and how would you expect the health insurance industry to react to the larger increases in hospital copayments? I guess that means that insurance would go up, the premiums for it, if it changed, and with the new medigap policies, the new policies that come out to cover the added copayment. So what would the effect of that be on the goal of utilization?

ALL PAYERS NOT TREATED EQUAL

Dr. **SCHRAMM**. Senator, I think the question certainly is well put, and I think it is a large-scale political question.

As the Government moves to shift these costs around, and in some instances shift them back to the individuals seeking care, hospitals will be forced, also, to think about shifting costs around, and one of the problems in the system that is contemplated is that it does not treat all payers equally. Hospitals are very sophisticated about being able to devise multiple price schedules such that payers who would be regulated like medicare or medicaid, who would not be able to bargain a discount like Blue Cross, would take a significant cut in their rates and I would suspect suffer some significant market disability under that system.

MEDIGAP COVERAGE PHENOMENON

As to the question of medigap coverage, I think that is a phenomenon that has flourished in recent years as people have attempted to shift financial risk through time. However, over the long run, I do not believe that the supplemental insurance industry will be viable as we shift more and more costs from Government to the private sector. As we make people fund more care themselves in their own generation, the cost of insurance which is basically sold only to old people will become just too high.

At this point, the Government is paying for most of the care for the elderly. As you know, medigap essentially focuses the financing of the system in one generation, the generation least able to pay for it, and I am not sure what the phenomenon in the long run will produce.

Senator **CHILES**. Dr. Meyer?

INDUSTRY POSITION SHORTSIGHTED

Dr. **MEYER**. Well, I have been a little distressed by the position that the health industry as a whole seems to be taking on this question. There are undoubtedly companies that have a different view.

It has been mainly to look at the special discounts that other bill payers get, and ask for their own, and to ask for essentially a systemwide control that puts everybody on a "level playing field."

I worry about the level playing field mentality, not that I want to be unfair to anybody, but because it treats discounts and bargaining between purchasers and sellers as something that is dangerous, whereas I think that negotiations between large sellers and large buyers is the hope of this industry.

With and all-payors approach, I think that we set a dangerous precedent, and therefore I find the industry position shortsighted.

EVALUATE THE OPTIONS

Your question about medigap makes an interesting point. I think you could expect, if you had more cost sharing, that medigap-type, or wraparound-type policies would increase.

However, one has to consider that when people go out and buy that wraparound insurance, they impose a tax on the Federal Government, in a sense, because the Federal Government cost-shares with that insurance company for the extra utilization that recipients might be induced to use.

One expert, Paul Ginsberg of the Congressional Budget Office, has evaluated the option of a tax on the premium of medigap-type insurance, set in such a way to compensate the government, if you will, for its share of the extra utilization that would be incurred because of that added coverage. Controversial, to be sure, but so is the coinsurance proposal.

It seems to me that there is a need to evaluate any of these options against what will happen to the elderly if we do nothing.

You know, we see this in program area after program area, those of us who come along and advocate reforms, whether it be cost sharing or multiple choice, are depicted as rather harsh.

On the other hand, the alternative to reform is what is occurring now—benefits are being cut all over the country by States under medicaid programs. They are cutting covered services. They are desperate for new ways to control costs.

If we don't try some of these ideas, this benefit cutting will get worse, as will eligibility restrictions.

Senator CHILES. Let me ask you one last question.

Given the administration's plan, which is to have the co-pay in the early days and then have the Federal Government pick up the total for a catastrophic illness, it is my feeling that the administration has sort of used the cost data that is out there on what catastrophic illnesses are now costing, because they have now said, I think, that only 4 percent of the cases would be catastrophic.

Given the fact that hospitals are able to adapt and shift the schedule, and doctors are the same way, do you think we can rely on what those catastrophic figures have been in the past? When Uncle Sam didn't pay for all of them, and when in effect Uncle Sam paid for none of them, the costs all fell on the patient. Again, there was a real rationing there, but aren't we going to have the same kind of situation there that we had when we went to medicare to start with, and started paying reasonable costs. Aren't we going to find a ballooning of catastrophic cases? Isn't it going to be easier, more expedient and humane, for the doctor to keep people in the hospital if they can't afford to go to a nursing home or anywhere else, but just keep them in the hospital, if it is a catastrophic case?

Are not these hospitals going to find ways to say, "Well, we need to make sure that there are plenty of tests and plenty of tubes, you know. We can pay for the CAT scanner and all these things if we keep the tests going in these directions."

Dr. SCHRAMM. Well, Senator, if I may, I——

Senator CHILES. And how do we keep that from happening?

MAKE CHANGES WITH EXPLICIT GUIDELINES

Dr. SCHRAMM. Yes. I think I would agree with you wholeheartedly. One of the difficulties we face when we contemplate changing the cost picture, is changing it in such a way that we in fact do get a real change in the future.

We have to be realists about this. We can change much of the financing picture, but unless we change it with explicit guidelines to those who provide the care, we will watch exactly what your question contemplates, and I think articulates quite well.

There is an enormous ability in the industry to change, to shift, to develop, and to accommodate. In the case, for example, of the proposed DRG's, we see the phenomenon of DRG creep. Hospitals can make a relatively average admission quickly begin to look like a catastrophic admission, if that is the way the Government regulations go about the proposal.

I think it is important to go back and examine the underlying premise of how this market, if you will, operates, and it is a market where people, I think, basically must be given the same signals and incentives regardless of who is paying for their care.

To operate as if the Government can enter the picture, paying for 45 percent on average of all the care in the average hospital in the United States, and say that the way to cost containment is to make the government begin to look like a prudent buyer through vouchers, or copayment, or something else, is Alice in Wonderland. The Government doesn't become a prudent buyer in a quasi-public industry when it is directly purchasing 45 percent of all care. The government has more responsibility than that as a purchaser. The Government is not Prudential. The Government is not Joe Doakes spending money out of his pocket. The Government is spending public money to purchase a commodity which many people think ought to be an entitlement or a right. It is a special commodity, and it is purchasing it in a quasi-public and well licensed and regulated industry. I think any financing reforms you contemplate must be thought through in terms of what absolute directive the government wants to set out in terms of how the professions and hospitals and other providers react so that we avoid the medical records shifting that will come with DRGs, or the accountancy shifting that would be certain to occur under a system that defines major illness as fully covered and some lesser degrees of illness as partially covered.

ESTIMATES MAY NEED RECALIBRATING

Dr. **Meyer**. I think your question is well taken, that we may need to recalibrate our estimates, in a sense. This is true not only for the reason you stated with regard to a world in which the government is suddenly paying for costs at the "back end," so to speak, but also if it were to alter its policies and pay its fair share of charity care for people not in the medicaid program, which includes the working poor or pay more fully for research and development costs, and so on.

So today's estimates may have to be refined for tomorrow's world.

Senator **Chiles**. But at the same time the Government is doing that, we are talking about cutting out utilization review.

So it looks to me like you are going to have the worst of all worlds, no utilization review, and——

Dr. **Meyer**. I don't bemoan the loss of that, Senator. I think that the evaluations I have seen, done by CBO and others, indicate no payoff to the country of PSRO programs. These programs were well intentioned, but I think that they take their place along with certificate of need as an approach that has not been successful even within its own terms, which is to cut costs.

And as I say, even those terms have to be questioned, because one has to look not only at regulatory benefits but also at the regulatory costs of those programs, which I think are considerable, particularly in the case of certificate of need.

So I don't worry about taking those checks off. I do worry about it a little bit in a world where you don't substitute anything for it, and therefore I have been critical of the administration for the last 2 years because they have been relaxing regulation and not proposing new incentives in its place, and I think they deserve to be criticized for that. But, I think now they are moving more in a sensible direction, and it is just that I worry about this prospective payment system preempting the field.

CATASTROPHIC APPROACH FOR ELDERLY IS FAIR

But to complete my point, you were referring, I think, to the possibility that with everything reimbursed in the late stages of diseases, the hospitals could become a kind of experimental laboratory for everything under the sun.

That is a concern, but I think it is a concern that we have to be willing to deal with, because I think a catastrophic approach for the elderly is fair, and I think that we have got tough choices on the questions of heart transplants and all the new technology coming in for those complicated cases, and those factors and the demographics are going to be driving up costs no matter what we do. It seems that we can at least try to eliminate the overlay of waste, so that we attenuate the increases somewhat.

Chairman DOMENICI. I know we have two more witnesses, and their testimony is terribly important, but maybe the two of you could try this on with a simple statement.

I think we have reached a point in social security in terms of benefits that they get per month by way of the checks. If we were at least able to in some way explain why their fund was going broke and had to be fixed, although I am not sure we ever made the point terribly well in the country. I think everybody believed it was happening, and I don't think they ended up, in very large numbers, claiming that anybody cheated them, that it is pretty rational what happened.

What is a simple explanation to senior citizens covered by medicare, whose fund is also going broke and therefore needs reform. What happened?

HOSPITAL INDUSTRY GIVEN CARTE BLANCHE

Dr. SCHRAMM. There is no simple explanation, Senator, in that it presents us with the gravest political problem. Americans are more in love with their hospital industry and their physicians than they were 15 years ago when the programs were enacted. Every time we make a dramatic breakthrough in life extension, such as the Clark heart transplant, all of us turn more and more to medicine as a magical wonder box that in fact can prolong and preserve life.

Now, because of that, I would contend, that over the last few years we have almost given, carte blanche to our hospital industry. We are spending more than we ever have before. The rate of inflation is almost three times the CPI. We are devoting a large part of GNP to this area and yet we have to talk to American senior citizens in terms of cutting back drastically and overnight on the government's guarantee of their ability to get care.

It is a complex problem, due in large part to extraordinary growth in the industry, very costly growth. You can't build a square foot of building more expensive than a hospital building. We continue to build these, and every year our hospital capacity is larger than it was in the preceding year. The technology involved is immense, and there are many secondary and tertiary industries that depend totally on growth of hospital technology, all kinds of plastics, high tech, electronic firms, and so forth.

Additionally, throughout the period of economic stagnation in the last 12 years, our hospitals have been one of the consistently growing parts of the labor force. People look to hospitals for the provision of jobs, and again this adds to the political problem that I began my remarks with.

But I think most importantly, we have seen the hospitals themselves a development of a strategy, totally rational given the reimbursement equation engendered in the medicare and medicaid law; that is the Federal Government will pay the reasonable cost of any service that the hospital and physician say is necessary for the treatment of the patient, which includes the extraordinary proliferation of all kinds of services and technology which is just not necessary to the provision of good health care.

It is very difficult to think of cutting back gradually, weaning ourselves away from a style and culture of hospital practice that has evolved over 15 years.

Chairman **DOMENICI**. Dr. Meyer?

THREAT OF GOING INTO RED FACES MEDICARE

Dr. **MEYER**. Well, I think medicare costs have been doubling almost every 4 years and I don't think that can be fully explained by this love affair, although I would agree with Dr. Schramm that it is an important factor. We've made commitments to the top quality health care, and I think we should try to honor those commitments.

But it seems to me it has to do, also, with the signals we have been sending over the years. We have said under medicare that we will pay for about anything that is done in a hospital, at any hospital, almost without limit, except that we won't pay our share of charity care around the country, and so on. There are a few exceptions.

The combination of this reimbursement policy and the fact that we have now made the medicare fund, if you will, a hostage to the old age fund, with interfund borrowing, for understandable reasons, threatens to make medicare go into the red, I understand, about 1988.

The alternative to that is a 7 to 11 percent payroll tax for medicare which is projected in the early part of the next century if we don't do something about benefits.

So I want to promise those elderly Americans as much as possible, but their interests have to be balanced against the interests of working people in this country who can take only so much of a tax load, and hopefully we can strike a reasonable balance between both of these social contracts.

Chairman **Domenici**. Thank you very much.

Dr. Schieber?

STATEMENT OF DR. SYLVESTER J. SCHIEBER, RESEARCH DIRECTOR, EMPLOYEE BENEFITS RESEARCH INSTITUTE

Dr. **Schieber**. Thank you, Mr. Chairman.

I am pleased to appear before you today, Mr. Chairman, to discuss the financing of Federal work-related retirement entitlement programs. It is an issue of grave concern, particularly in this city, but I think also in the country at large.

I think one of the problems is that we have gotten ourselves in a box where we are looking beyond some of the goals of our retirement programs to particular financing problems that we have in these programs today.

I think we should not look past the goals of retirement policy in terms of seeking solutions to the problems that we have.

FOCUS ON NEW SET OF GOALS

In terms of goals for retirement, I think there is a range of goals we need to look at. Traditionally, we have concerned ourselves with adequacy and equity. I think there are new sets of goals that we have to focus on at this time.

A primary goal that we have to focus on in these programs is the goal of solvency. The programs that provide retirement benefits to the elderly of society have to be solvent, or benefits cannot be paid.

The workers who support these programs must perceive that they are solvent, or they are not going to be willing to support them over the long run.

Also, I think that the balance of equity is extremely important. It is important in the basic programs themselves. There, I am talking about the equity of sharing the burden of benefits and supporting them, but I think we also have to be equitable in the pursuit of changing these programs.

The third goal that I think is very important is the goal of stability, and this is a particular goal that we are facing at this time.

The programs have to be perceived as being somehow balanced over the long-term timeframe.

In the recent past, we have been suffering a set of problems that have upset the stability of our retirement programs. In the short run, we have had a set of demographic factors, but primarily economic factors, that have been unbalancing our program.

PROGRAMS HAVE TWO CRUCIAL VARIABLES

There are two crucial variables when we come to look at these programs.

The first is the ratio of beneficiaries to workers, and here we have been suffering from both the economic and demographic twists of fate. Unemployment rates have been running higher than we have anticipated in recent years and as a result we have had fewer workers supporting these programs than anticipated. At the same time when unemployment rates are high, we drive people into the beneficiary category.

The second problem that we have that is causing instability in the program is the relationship between the growth in wages and the growth in benefits. We have established programs where we are indexing the beneficiaries, payments on the rate of growth in prices, and in recent years the rate of growth of prices has been exceeding the rate of growth of wages for people who remain in the work force.

In cases like social security, where there is a very direct link between contributions—between wages and total contributions—and rising prices and total benefits, we have seen very substantial losses.

At the same time, we are realizing substantial changes in life expectancy at retirement, and people are not only receiving higher benefits than we originally anticipated, they are also receiving them longer than we had anticipated.

One of the problems, the particular problem in the case of the civil service retirement system, and to some extent in other programs, is the measurement of the cost of these programs.

MYTHS ATTACHED TO VARIOUS PROGRAMS

There is a broad set of myths that are attached to various programs as to how they are supported. Many of the Federal workers covered by the civil service retirement program perceive that they contribute their 7 percent of salary to this program, the employer or the employing agency, contributes a like amount, and that there is interest paid on the trust fund that accumulates, and that this somehow supports the program.

Well, when one looks through the veil of financing of Federal retirement programs, what one finds is that instead of a cost of these programs running around 14 percent of payroll at the civil service level, we have an actual cost somewhere in the order of 36 to 40 percent of payroll.

In terms of the military retirement program, which is totally noncontributory, the cost of this unfunded program runs around 50 percent of payroll.

The problem in the short run is partly a budgetary problem of large deficits looming on the horizon, but in the case of Federal retirement programs it is also a problem of accruing liabilities. If one looks back at the fiscal years 1980 and 1981, in the two largest Federal retirement programs, military and the civil service retirement program, in fiscal 1980 the unfunded liabilities in these two programs combined rose by $141.7 billion, and in fiscal 1981 by an additional $75.2 billion.

The 2-year increase of the unfunded liabilities was about 28.6 percent over the 2-year period.

CONFUSION WHERE UNFUNDED LIABILITIES OCCUR

There is also some confusion as to where these unfunded liabilities are occurring from. One popular myth is that the Federal Government in the early years of the civil service retirement program, for example, did not contribute its fair share, whatever its fair share might be. If one looks back at the actual contributions to the program over the first 35 years of the program, what one finds is that the contributions on the part of the employer almost exactly matched the contributions on the part of the employees.

Over the 35-year period, the Federal Government contributed one-quarter of $1 billion less than the employees did, if you net out their withdrawals, because Federal employees when they withdraw from the system can withdraw their contribution.

Even if you accumulated the quarter of a billion dollars from 1955 onward to the present time, you would only reduce the current unfunded liability in the civil service retirement system of roughly $530 billion by about $10 billion. So even if there had been equal contributions in the early years, there would still be these massive unfunded liabilities, and it would still be growing at an extremely rapid rate.

Chairman DOMENICI. Doctor, you have made that statement, and I assume that you have researched it, and you maintain that that is accurate?

Dr. SCHIEBER. There is a publication put out by the Office of Personnel Management called "Federal Pension Benefit Facts," and the table basically shows the employer contribution in 5-year increments, the employer or agency contribution to the civil service retirement trust fund, and the employee contribution, and if you aggregate the two columns, they show roughly a quarter of a billion dollars difference over the period 1921 through the end of 1955.

Chairman DOMENICI. And there was no additional period in that, during one of the presidencies, when nothing was paid?

Dr. SCHIEBER. I have not gone back and found the basic data. I am merely looking at the published data. I have not gone back and looked at the annual data. Mr. Hustead could probably answer this question better than I can, but there was no 5-year period where there were no contributions on the part of the employer.

Chairman DOMENICI. Thank you.

ECONOMIC BURDEN OF SUPPORTING PROGRAMS

Dr. SCHIEBER. Once we move out of the short-run problem, we have got long-run problems in terms of looking at the economic burden of supporting these programs on the workers, and if you look at the estimated budgetary costs of both the civil service retirement system and the military retirement system, which shows up on page 6 of my prepared testimony, table 4,[1] what you see is that in the civil service retirement system the net cost, the taxpayer cost of this system will be from about 25 percent of payroll in 1982 to about 31 percent of payroll by the year 1990, and nearly 33 percent of payroll by the year 2000.

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[1] See p. 95.

So the taxpayer cost of this program is scheduled to go up by nearly a third relative to Federal salary costs over the next 20 years. The military retirement program, on the other hand is far more expensive from the perspective of the taxpayer, running at 54.7 percent of payroll currently—it is totally unfunded—to about 63.7 percent of payroll by the turn of the century.

In terms of searching out policies to adjust these programs, I think we have to be very careful in terms of fixing the program merely to solve our budgetery problems. The problems of retirement planning are long term, life-cycle type processes. The individual who begins to make retirement plans in his late 1930's or early 1940's and starts to schedule his savings behavior, starts to schedule his whole work pattern around the accrual of retirement benefits that he feels he is accruing from his employer. He cannot instantaneously make adjustments the day before he reaches retirement if we decide to change one element of his retirement portfolio.

That does not mean, on the other hand, that one cannot consider adjusting Federal pensions or social security. I think we have gone through a fairly careful process during the last few months of reviewing the social security problem.

There are many people who are dissatisfied with various elements of the package, but there has been some kind of consensus formed that there were adjustments needed and that adjustments could be made.

I think that one can look at both the military retirement program and the civil service retirement program, and one can decide what goals the Federal Government wishes to achieve in terms of these retirement programs. Then we should figure out how we can get from the current situation to the modified situation if in fact we determine that we are looking for some alternative policy structure.

With that, I will terminate my comments.

Chairman DOMENICI. Thank you very much.

Statement of

Sylvester J. Schieber*

Mr. Chairman, I am pleased to appear before you today to discuss the financing of federal work related retirement entitlement programs. I appear in my capacity as Research Director of the Employee Benefit Research Institute. EBRI is a nonprofit organization dedicated to providing research and analysis which can serve as a basis for sound policy toward employee benefits. EBRI as an institution does not take positions on public policy issues. Today I am going to direct my prepared comments primarily toward the Civil Service Retirement System (CSRS) and the military's retirement program. I will also discuss the budgetary implications of covering new federal workers under Social Security.

BACKGROUND

The earliest predecessor to today's federal retirement progams can be traced back to 1636 when the settlers at Plymouth Colony decreed "that any man sent forth as a soldier and returned maimed should be maintained by the colony during his life." The colonies made similar provisions for men who were disabled and for survivors of men who were killed in military expeditions against the Indians. The first national pension law, which dates back to 1776, provided half pay for life, or during disability, for soldiers disabled during the Revolutionary War. Military provisions based on service date back to 1780. Gradually, service pensions came to be provided separately for veterans of each war. In 1861, the first major nondisability program provided for voluntary retirement of military officers after forty years of duty. In 1885, nondisability retirement was extended to Marine and Army enlistees, providing voluntary retirement after thirty years of service. 1/ The federal Civil Service Retirement System was started in 1920. The Social Security Act established the Social Security program in 1935 although monthly benefits were not paid until 1940. After a couple of unsuccessful efforts the Railroad Retirement System, a federally administered railroad employee retirement program, was established in 1937. In addition to these there are a host of other federally sponsored retirement programs. These other programs are much smaller than the first four programs delineated above. My comments today will focus almost totally on the financing situations or problems associated with the Civil Service Retirement System (CSRS) and the Military Retirement Program. If there are questions on these or on Social Security I will be glad to respond, to the extent I am able.

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* The views in this statement are those of the author and do not necessarily reflect the views of the Employee Benefit Research Institute, its Trustees, members, or other staff.

Retirement Programs for Federal Workers

With a couple of notable exceptions the retirement programs for federal workers, both military and civilian, are largely unfunded. The military program is funded strictly on a pay-as-you-go basis. The CSRS does have a trust fund and there has traditionally been a pattern of matching contributions to this fund by employees and their agency. Since 1969, there have been additional appropriations from the general fund to pay interest on, and amortize certain of the unfunded liabilities.

There is a considerable amount of confusion about the cost and funding of federal pensions, particularly the CSRS. For example, there is a prevalent belief that the cost of the CSRS is roughly 14 percent of payroll -- being shared equally by the workers and their employing agency. The confusion may

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1/ Office of the Actuary, Defense Manpower Data Center, Valuation of the Military Retirement System: Fiscal Year 1980 (Washington, D.C.: U.S. Government Printing Office, 1981), p.2.

arise because there are various ways to estimate or calculate the cost of a retirement program.

One common way to estimate the cost of a retirement program is to use what actuaries call the "entry age normal cost method." This method estimates the percentage of a worker's salary that would have to be set aside each year to fully fund benefit entitlements before retirement. Aggregating the normal cost of all workers provides an estimate of the employer's total normal cost. Public Law 95-595, passed in 1978, requires that all federal pension plans submit an annual report to Congress on their actuarial status. These reports provide normal cost estimates based on a consistent set of economic assumptions. Table 1 shows the estimated normal cost of the CSRS and the military program based on the P.L. 95-595 report filed with Congress during 1982.

TABLE 1

Entry Age Normal Cost of CSRS and MRS as Percent of Payroll

Program	Employee Contributions	Employer Cost	Total Normal Cost
Civil Service	7.0%	29.8%	36.8%
Military Retirement	0.0	47.0	47.0

SOURCE: P.L. 95-595 Reports filed with U.S. Congress for fiscal year 1981.

Some policy analysts argue that federal pensions should really be financed on the same basis that the Employee Retirement Income Security Act (ERISA) requires private sector employers to fund their pension plans. Specifically, ERISA requires tax-qualified defined benefit plans to amortize their unfunded liabilities. Table 2 shows the cost that taxpayers would bear

TABLE 2

Taxpayer Liabilities as Percent of Payroll for CSRS and Military Retirement Compliance with ERISA in 1981

Program	Taxpayers Liabilities: Employer Normal Cost	Taxpayers Liabilities: Amortization of Unfunded Liabilities	Taxpayers Liabilities: Total Cost	Actual Contributions
Civil Service	29.8%	56.3%	85.1%	32.3%
Military Retirement	47.0	108.0	155.0	58.0

SOURCE: P.L. 95-595 Reports filed with the U.S. Congress for fiscal 1981.

if CSRS and the military program were required to comply with the federal standards that were imposed on pre-ERISA plans. Such compliance would have raised the cost of CSRS to the taxpayers to 56.3 percent of payroll in 1981 while the military program would have cost taxpayers 155 percent of basic military pay plus the employer portion of the FICA tax, since military personnel are covered under Social Security,

In fiscal 1981 the employee contributions to CSRS were $4.0 billion; while the military personnel do not contribute to their retirement program. During the 1981 fiscal year these two programs had disbursements of $31.5 billion in benefits. The net budgetary cost to the taxpayer then was $27.5 billion (i.e., $31.5 b - $4.0 b = $27.5 b) in 1981.

Furthermore, since neither the CSRS nor military pension is funded the federal pension burden will increase for future taxpayers. Unfunded federal pension promises are obligations that taxpayers will ultimately have to pay. While they are not reflected in the federal debt, they are claims on future government revenues which are defined by federal pension statutes. Table 3 shows the recent levels and growth of unfunded benefit promises in the two largest federal pension programs.

TABLE 3

Unfunded Liabilities of CSRS and Military Retirement

	Unfunded Liabilities			Growth in Unfunded Liabilities		
Program	1979 (billions)	1980 (billions)	1981 (billions)	FY 1980 (billions)	FY 1981 (billions)	Two Year Increase (Percent)
CSRS	$403.1	$469.5	$498.9	$66.4	$29.4	23.8
Military Retirement	355.8	431.1	476.9	75.3	45.8	34.0
Total	$758.9	$900.6	$975.8	$141.7	75.2	28.6

SOURCES: P.L. 95-595 Reports filed with the U.S. Congress for fiscal years 1979, 1980 and 1981.

There is some contention on the part of various federal civilian employee groups that it was past imprudence on the part of the federal government that accounts for most of the current unfunded liabilities in CSRS. For example, the National Federation of Federal Employees, in printed materials opposing Social Security coverage of new federal workers, argues that the current CSRS "unfunded deficit originated because the federal government failed to pay its share into the fund from 1920 to 1956." It is not clear what the government's "share" was during this period but employee contributions, net of refunds, were only one-quarter of one billion dollars more than government appropriations and contributions for the period 1920 to 1955. The total unfunded liabilities of the CSRS at the end of 1955 were less than $10 billion. By comparison, of the roughly $500 billion in unfunded benefit promises on the CSRS books at the end of fiscal 1981, nearly one-quarter (23.8 percent) arose during 1980 and 1981. The growth in the CSRS unfunded liability in 1980 and 1981 was more than 10 times the total accumulation of unfunded liability over the first 35 years of the program's existence.

The prospects for the future are that the costs of these programs, if not modified, are projected to rise relative to payroll costs for active federal workers between now and the turn of the century. Table 4 shows the projected taxpayer burden of CSRS and military retirement as a percentage of pay for workers covered by these programs. Over the next twenty years the relative cost of the military retirement is projected to increase about one-sixth over current levels. CSRS relative costs are projected to rise by nearly one-third over current levels by the turn of the century.

TABLE 4

Estimated Net Budgetary Outlays for Federal Pension Programs
as Percent of Covered Payroll

	CSRS 1/	Military Retirement
1982	24.9	54.7
1983	26.8	55.9
1984	27.8	55.9
1985	28.6	56.8
1986	29.3	57.4
1987	29.8	57.8
1988	30.4	58.3
1989	30.9	59.0
1990	31.1	59.6
1991	31.6	60.0
1992	31.9	60.7
1993	32.0	61.0
1994	32.2	61.5
1995	32.3	61.9
1996	32.4	62.1
1997	32.5	62.6
1998	32.5	63.0
1999	32.6	63.4
2000	32.6	63.7

SOURCE: Computed by the author from P.L. 95-595 Reports filed with the U.S. Congress for fiscal 1981.

1/ The net budgetary cost is computed as total benefits paid less employee contributions. This difference is then divided by projected covered payroll.

The only ways that short-term budgetary savings can be realized from pay-as-you-go retirement programs are to increase employee contributions over current levels or to decrease benefits that would be paid under current law. From a casual reading of the 1984 Budget it is clear that the OMB understands this principle. If the CSRS recommendations included in the Budget are implemented the CSRS employee contribution rate will increase by 57 percent in only two years. At the same time a 40 percent phased reduction of the normal cost of CSRS would begin. In other words employee contributions would rise by nearly 60 percent for 40 percent lower average future benefits.

While budgetary constraints are important in the design and implementation of retirement programs it is not clear that relatively instantaneous changes of great magnitude are desirable for these programs. It was largely the government's concern that pension programs be stable and dependable that led to the passage of ERISA in 1974. This is not to say that federal pensions should or should not be modified. Rather it suggests that the Congress should consider what it wants to accomplish through the federal retirement programs. The Congress should also consider how much of the federal retirement costs should be borne by the taxpayers. Then the actual design of a long-term retirement program can be considered. There is a good example of this process now underway.

CSRS UNDER REVIEW

The National Commission on Social Security Reform has recommended that federal workers hired after January 1, 1984 should be covered by Social Security and a modified federal pension program. This proposal is being attacked by several organizations that represent federal workers. One of their major contentions is that this proposal will raise the burden of federal retirement on taxpayers. Covering federal workers under Social Security can only raise the costs of federal retirement if benefits are raised or employee contributions decreased. As an example of the implications of the National Commission's proposal the costs of the current system must be compared to an alternative federal program. The first thing such an analysis must estimate is the cost of the current system.

The budgetary cost of the current CSRS 2/ can be described by the following simple formula:

(1) CSRS Budgetary Cost = benefits plus refunds minus employee contributions.

If new federal workers are covered under Social Security and a supplemental pension is established the implications for taxpayers will depend on several factors. There have been several coordinated pension plans of this type designed in recent years that could apply to federal workers. In order to show the budgetary impact of covering new federal workers under Social Security and a modified pension I have analyzed a proposal that captures the essence of the bill (S2905) introduced by Senator Ted Stevens (R.-Alaska) during 1982. Senator Stevens' proposal modification would cover new federal workers under Social Security and a defined contribution pension plan costing the government (i.e., the taxpayers) an estimated 14.5 percent of payroll.

The particular method for modifying the system analyzed here and included in Senator Stevens' bill calls for Social Security coverage coordinated with a modified federal pension for new federal employees beginning in 1983. The analysis here assumes the policy change would be implemented at

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2/ See Sylvester J. Schieber, The Cost and Funding Implications of Modifying the Civil Service Retirement System (Washington, D.C.: EBRI, 1982) for a complete discussion of the derivation of these estimates.

the beginning of 1983 in correspondence with the Stevens' bill. Implementing such a program in 1984 would not significantly affect the analysis or results. That means that the ongoing costs of the total system have to be estimated separately for the closed system that applied to old hires, and for the new system covering future employees. The budgetary costs of the separate systems can be aggregated to get the combined systems cost.

The total budgetary impact of modifying CSRS would be different from the effect on the various accounts taken separately. Both CSRS and Social Security are now within the unified budget. Because the proposal analyzed here would segregate the old and new systems, the costs for the various accounts can be considered as follows:

(2) Closed CSRS costs = benefits (old) plus refunds minus employee contributions.

(3) New CSRS costs = benefits (new) plus refunds minus employee contributions.

(4) Social Security costs = benefits (SS) minus employee contributions.

(5) Total Budget cost = old CSRS cost plus new CSRS cost plus Social Security cost. 3/

Equation (2) is essentially the same as equation (1) discussed earlier, which applied to the current system. The difference is that equation (2) applied only to those workers on the payroll or persons entitled to CSRS benefits (receiving or deferred) on the assumed date the modified system would be put into operation. Equation (1), in contrast, assumed that future new

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3/ See Sylvester J. Schieber, The Cost and Funding Implications of Modifying the Civil Service Retirement System (Washington, D.C.: EBRI, 1982) for the detailed projections of the component elements of each of these equations.

workers would continue to be covered under the current system. Equation (3) represents the budgetary cost of the new federal retirement program.

Equation (4) shows the budgetary effects of Social Security coverage of new hires. The budgetary effect is different from the effect on the OASDHI accounts, in that the specific account would be credited for both employer and employee contributions. Since Social Security is in the unified budget, the employer contribution would show up as an expense in the agencies' budget and as equal trust fund income in the Social Security accounts. The two would cancel each other out.

The total budgetary costs, modifying CSRS as considered here, can be calculated according to equation (5) and compared with the cost of the current system derived on the basis of equation (1). Table 5 shows the projected budgetary cost of the current system and the proposed modified system and the net differences. Based on projections, moving to the modified system on January 1, 1983, would reduce the budgetary costs of federal retirement by $1 billion over the first five years. While the cost savings during the early years would be moderate in relative terms, the actual numbers that would show up in the unified budget might be affected by moving accounts in or out of the budget. This would not affect taxpayer costs for federal retirement.

The Stevens legislation would cover newly hired workers mandatorily and offer incentives for current workers to move to the new system. The savings from modifying CSRS in accordance with this proposal would grow significantly after the turn of the century as the federal work force becomes predominantly covered by the new system. Ultimately, the savings would grow to nearly one-quarter of the current system's cost if it were to be perpetuated. The net savings estimates of moving to the modified system do not include any savings

TABLE 5

FEDERAL AGENCY AND GENERAL REVENUE EXPENDITURE PROJECTIONS FOR THE CURRENT CIVIL SERVICE RETIREMENT SYSTEM AND MODIFIED SYSTEM IN CONJUNCTION WITH NEWLY HIRED WORKERS UNDER SOCIAL SECURITY, SELECTED YEARS 1983-2050

	Current System (billions)	Modified System (billions)	Net Savings (billions)
1983	$17.9	$17.7	$0.2
1984	20.0	19.2	0.1
1985	22.4	22.2	0.2
1986	24.3	24.1	0.2
1987	26.3	26.1	0.2
1988	28.4	28.1	0.3
1989	30.2	30.1	0.3
1990	31.3	31.7	0.6
1991	34.2	33.7	0.5
1995	42.4	41.7	0.8
2000	54.5	54.7	-0.2
2005	70.8	68.1	2.7
2010	93.2	86.1	7.1
2015	122.4	102.9	19.5
2020	161.8	130.8	31.0
2025	216.6	167.3	45.3
2030	277.7	211.8	65.9
2035	360.0	273.6	86.4
2040	465.7	360.3	105.4
2045	604.1	499.2	104.9
2050	786.7	683.6	103.1

SOURCE: Sylvester J. Schieber, The Cost and Funding Implications of Modifying the Civil Service Retirement System, (Washington, D.C.: EBRI, August 9, 1982). Tables 2,6, and 8.

that could be realized if a Social Security windfall reduction provision current workers were implemented simultaneously.

In sum, modifying the CSRS along the lines of the Stevens proposal would result in significant budgetary savings over both the short and long term. Coverage of new hires under Social Security would maintain the level of employee contributions for retirement purposes. In a budgetary sense then, any proposal coupled with Social Security coverage that just maintains or does not increase total federal retirement benefits cannot cost the taxpayers more than the current system.

MILITARY REITREMENT POLICY REVISITED

In 1870 when the Congress established voluntary retirement for officers it permitted them to retire after thirty years of service upon approval of the President. The retired pay was to be 75 percent of the regular pay at the officer's grade. In 1885 parallel provisions were extended to Army and Marine enlistees. In 1916 the Congress established Naval promotion boards to select Rear Admirals, Captains and Commanders on the basis of age-in-grades. Officers not promoted were retired at 2.5 percent of pay per year of service. The reason for this legislation was to unclog promotion channels. By 1938 the Navy was again experiencing promotions bottlenecks and Congress provided for voluntary retirement with twenty years of service at the discretion of the President. The Army and Air Force Vitalization Act of 1948 established 20 years as the minimum service requirement for voluntary retirement, corresponding with the Navy's earlier provision. The Career Compensation Act of 1947 created the military's disability retirement system which remains basically unchanged today. 3/

The primary findings of the President's Commission on Military Compensation under President Carter was that: "The military retirement program, which allows retirement after 20 years of service at half of basic pay, can no longer be justified." 4/ The Commission's analysis of historical

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3/ Office of the Actuary, Defense Manpower Data Center, Valuation of the Military Retirement System: Fiscal Year 1980 (Washington, D.C.: U.S. Government Printing Office, 1981) pp. 3-4.

4/ Report of the President's Commission on Military Compensation (Washington, D.C.: U.S. Government Printing Office, 1978) p. 2.

job assignments showed a considerable shift in the occupational distribution of military personnel after World War II. There has been a significant shift out of combat positions into white- and blue-collar occupations. They concluded that the current system was a clumsy mechanism for maintaining a vigorous military. In the retirement area the Commission recommended "establishing a new noncontributory retirement plan consisting of three parts: a retirement annuity to provide for old age needs; a trust fund to provide deferred compensation; and along with the trust fund, severance pay to assist former service members in their adjustment to civilian life." 5/

Other Considerations for Federal Pension Policy

Without going further on the Commission's analysis or other specific policy recommendations, it is important to understand that the inherent cost of federal pensions, both military and civilian, should not be addressed solely on a short-term budgetary basis. The federal government hires, compensates and retires people within the national economy. At this time the federal government as an employer pays disproportionately large retirement benefits relative to virtually all other segments of the economy. There is considerable evidence to suggest that this has distorted other elements of the government's compensation policy and workforce behavior.

For example, the average retirement age under CSRS is below age fifty-eight. The average retirement age in the military retirement program is age forty-two. Tabulations of the March 1980 Current Population Survey show that 71.4 percent of military pension recipients are under age sixty-two and that more than two-thirds of this group continue to work. While only 34.5 percent of federal civilian pensioners are under age sixty-two, more than half

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5/ *Ibid.*, p. 3.

of them continue to work. The average worker in the private sector, on the other hand, is facing a normal retirement age of sixty-five in his or her pension plan. They can probably retire prior to that age but their benefits will be actuarially reduced to account for their early retirement. They are not eligible for indexed Social Security benefits until age sixty-two and then only at 80 percent of the full benefit. As a result the average age of people claiming Social Security retirement benefits is sixty-four. Possibly the federal government wants to continue to occupy a unique niche in the labor market but it is not clear that the current position is one that has been attained purposefully. If the Congress seeks to adjust federal pension policy they should consider both the long-term cost implications as well as the broader retirement policy impacts of the options they consider.

SOCIAL SECURITY

The cash benefits provided by Social Security are also financed on a pay-as-you-go basis. This means that the revenues collected from current workers and their employers are paid out almost immediately as benefits to retirees. Given the small balances in the trust funds, revenues must closely match benefits during any particular time period for the program to be solvent. It is improbable that Social Security will ever be financed on any other basis. I have done considerable research on Social Security but will limit my comments in this area to specific inquiries that the Committee may have in this regard.

Chairman **Domenici**. Dr. Hustead.

STATEMENT OF EDWIN C. HUSTEAD, FSA, DIRECTOR, ACTUARIAL CONSULTING SERVICES, THE HAY GROUP

Mr. **Hustead**. Thank you.

Let me also submit my statement for the record[1] and just make a few points.

TAKE PROGRAMS OFF BUDGET

I think a key factor here is the one that Dr. Schieber emphasized, and that is that the way the budget works now, the emphasis on the retirement program, and I am talking about three programs here, military retirement, civil service, and railroad retirement, the whole equation is the amount that comes in from outside the Government minus the benefits that are paid out during the year.

Because of the fact that the intergovernmental transfers work their way through the budget and not to the bottom line, the focus is on these items. The focus is not on the long-term costs of the system, and that is unfortunate from an employer perspective.

From the beneficiaries' perspective, when you go to trim next year's budget, the focus is entirely on the annuitants, not on the employees, and they as a consequence generally bear an unfair burden of the cuts.

So I suggest that you consider taking these programs off budget. Their costs will not disappear. They will just be refocused as a true employer cost, the same as would happen if the Federal Government were a private employer.

As far as the status of the three funds, the civil service retirement system is in good shape because of the current funding legislation. It is growing, and it will continue to grow with the one caveat that if the system is closed and all Federal employees are put under a new system, new Federal employees, then there will be financing problems 20 to 25 years from now.

There are, however, some very simple solutions to this that will not increase the Government's long-term costs at all, but simply accelerate payments that would have to be scheduled in the future anyway.

Railroad retirement is another matter. The fund is in very bad shape. Unless steps are taken now, the fund will run out of money next year, or the year after that. Under current legislation that means benefits will automatically be cut. There are steps that have to be taken to correct that situation.

As to why the railroad retirement is in its current situation, it is a classic case of a declining work force. There is now one railroad retirement employee supporting every two annuitants.

The military retirement system has no funding problem because the military retirement system has no funds, and I think this is a consideration that should be looked at. There is really no reason that the military retirement system should not be funded in the same way that civil service is and that private sector programs are funded.

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[1] See p. 106.

CREATE A MILITARY RETIREMENT FUND

I would recommend that Congress consider enacting legislation creating a civil service—I am sorry, a military—retirement fund, and along with that create a board of actuaries to oversee the estimates of the fund.

One of the features of civil service and railroad retirement is that there is an independent board of actuaries. One of the main reasons an independent board is there is so that the administrating agency is not able to rig the actuarial assumptions and therefore the cost.

Finally, just a brief statement on the cost of the three systems. Using a consistent set of assumptions, the social security II-B, the civil service retirement system over the long run will cost 36 percent of payroll, of which the employees pay 7 percent, military retirement will cost 55 percent, and railroad retirement will cost 14 percent.

Military and railroad employees also receive social security, so those costs have to be added in.

And finally, it is important to note that under both railroad retirement and military, the entire pay is not being covered by the retirement system, so while presenting the figures, I hesitate to suggest that they be directly compared.

Thank you very much.

Chairman DOMENICI. Thank you.

Statement of
Edwin C. Hustead, FSA, MAAA
Director, Actuarial Consulting Services, Washington Office
of The Hay Group*

Before the

Senate Budget Committee
United States Senate

February 4, 1983

Mr. Chairman, I am pleased to appear before the Committee to discuss the financing of work-related entitlement programs particularly the Civil Service Retirement, military retirement, and railroad retirement systems. I was Chief Actuary of the Civil Service Retirement system for seven years. In that capacity, and through a number of projects in my current position as Director of Actuarial Consulting Services for the Washington office of The Hay Group, I am very familiar with the financing aspects of each of the three systems.

Le me first address the reasons why funding of any of these benefit systems does not have a direct impact on the Federal deficit or tax policy. I will then discuss why the funding is important for other purposes. Finally, I will review the funding status of the three retirement systems.

The impact of federal retirement systems on the economy is simply the amount of money brought in from outside the federal government less the amount paid out. For instance, in the Civil Service Retirement system, only the employee contributions, the annuities and the refunds paid to former employees affect the budget deficit. All employer contributions, as well as the interest on the fund, are intergovernmental transfers. As such they have no impact on the budget deficit.

* Note: The views expressed in this statement are the views of the speaker and do not necessarily reflect the views of The Hay Group.

If in fiscal 1983 the CSR fund receives $5 billion in contributions from employees and pays $20 billion in benefits to annuitants, the deficit associated with the CSR system will be $15 billion. If the government contributes one billion dollar or one hundred billion dollars, or nothing, the net budget effect is still the $15 billion from sources outside the government. One result of this financial equation is that proposals to change the system which are geared to create immediate budget savings concentrate on reducing this years' benefits or increasing employee contributions.

There are, however, some other very good reasons for advance funding the government retirement systems as opposed to a pay-as-you-go system. In the first place, funding is good accounting practice. The General Accounting Office has strongly recommended improvements in the financing of all of the systems over the years. By proper accounting the agencies are forced to consider their true personnel costs. For instance, retirement costs must be included in the comparison of the cost of performing a function inside the government to contracting out the function.

Another reason for advance funding is to accurately measure the long-term effect of proposed changes in the retirement system. If only the effect of a change in benefits in the next five years is considered it is easy to overlook a very important consequence of the change a generation from now after current employees retire.

Finally, despite a growing realization that the benefits offered by a federal system are not guaranteed, employees and annuitants are more comfortable with a large and growing fund, such as the Civil Service Retirement fund, than are those covered by a declining fund, such as railroad retirement, or no fund as in the case of military retirement.

The funds would have even greater impact if they were moved out of the unified budget, thus, shifting the focus from benefit payments to employer contributions. As a result, the government would directly recognize the total cost of the retirement system as do private sector employers. By moving the retirement funds off budget the systems would be viewed on their own merits and not on the effect they might have on general revenue operations. The result would be to change the budget outlays from annuity payments to employer contributions.

The current process of including the funds in the unified budget often confuses appropriate financing of the retirement systems with the impact on the total deficit. I believe that the retirement system issues are important enough to be viewed in isolation without confusing them with general revenue issues.

A majority of the members of the National Commission on Social Security Reform were expressing a similar concern when they recently recommended that the social security fund be put off budget so that changes "should only be made for programmatic reasons, and not for purposes of balancing the budget".

Finally, let me briefly discuss the funding situation of each of the retirement systems. The funding method for the current Civil Service Retirement system was set in law in 1969. If the funding had not been strengthened, then, the fund would have run dry in the 1970s. Under the current law all reasonable projections show that the CSR fund will be sufficient to pay benefits for the next 100 years. The Board of Actuaries and the General Accounting Office have suggested that the funding should be strengthened even more but this is not essential to meet the primary purpose of making sure that money will be available to pay benefits when they are due.

There is one important caveat to the sufficiency of the Civil Service Retirement system funding. If the system is closed to new employees, the fund will eventually decline and hit zero in about 20 to 25 years although benefits will be paid for over 75 years. This will happen, for instance, if new federal employees are covered by social security and a totally separate retirement system. In this event, the Congress should consider accelerating the funding of the retirement system so that it will always be sufficient to pay benefits. This would not be an added cost but a necessary escalation of government payments to meet the existing cost.

By contrast, the railroad retirement system fund is not in such a fortunate situation. This system faces a severe short term funding crisis quite similar to the social security short term crisis. If steps are not taken to improve the financing of the system, the fund will not have sufficient money to pay benefits within the next fifteen to 27 months. Current law requires that the benefits be cut if it appears that the fund will not be sufficient to pay all benefits in the coming year.

There are two reasons why the railroad retirement fund is in trouble. First, the workforce has declined sharply in the last generation so that there are now more than two annuitants supported by each employee. Second, the railroad retirement fund loans substantial amounts to the social security and Railroad Unemployment Insurance funds. The funding crisis could be delayed a few years by simply paying off these loans. Additional steps that could be taken to avoid depleting the fund would be to increase the employer and employee taxes or reduce benefits. While there is a severe short term crisis, the railroad retirement system will be in good shape a generation after the workforce has stabilized.

The military retirement system has no funding crisis because the military retirement system has no fund. The payments required from the system are peaking as a percentage of basic pay since most of the generation that was first covered in World War II and Korea has now retired.

I believe that it is important that the military retirement system have a fund so that the true current cost of the system can be reflected in the defense budget. For instance, the cost of increasing the military personnel strength will be understated by a third if retirement costs are not included.

If the military retirement system is funded, the enabling legislation should provide a Board of Actuaries to review and report on the operations of the system. Use of an independent board has worked very well for each of the other retirement systems. Since the cost of a retirement system is very sensitive to the economic and demographic assumptions made by the actuaries it is important to have the setting of these assumptions beyond the control of the administering agency.

The cost of these three systems varies significantly because of the differing benefit formulae, earliest retirement ages, and indexing methods. One way of measuring the cost is to determine the average of the benefits as a percentage of payroll over the next 75 years. Using the Social Security II-B assumptions for consistency, the CSR system will cost 36% of payroll, the military retirement system will cost 55% of basic payroll and the railroad retirement system will cost 14% of covered payroll. The military and railroad employees also receive social security benefits with an average cost of 14% of payroll. It is also important to note that the benefits of the military and railroad employees are not based on total pay.

In summary, the funding of these three retirement systems does not now have a direct impact on the budget but funding is important as a measure of the cost of the systems and to provide security to those covered. However, the impact of the funding would be greatly improved if the funds were placed off budget.

Among the three systems, the Civil Service Retirement system faces no short or long term crisis but the funding will have to be accelerated if the system is closed. The railroad retirement system has a short term crisis but no long term problem. The military retirement system has no fund. I will be happy to answer any questions you have.

Chairman DOMENICI. Mr. Hustead, I understood Dr. Schieber to say that the Federal retirement fund was being paid for by 7-percent contributions from the employer and employees—which is 14 percent—costing between 36 and 40 percent. I thought I heard you say that their annuitant fund is solvent.

Mr. HUSTEAD. Yes.

Chairman DOMENICI. You said solvent under current funding?

Mr. HUSTEAD. Yes.

Chairman DOMENICI. Are those some words of art that I don't quite grasp? Does that mean because we are indeed committed to appropriate what is necessary by law?

Senator CHILES. The hose of the Federal Treasury.

BENEFITS GUARANTEED UNDER SYSTEM

Mr. HUSTEAD. No. The civil service system funding is complicated, but it boils down to the same type of funding that a private-sector employer uses. The benefits are guaranteed under the system, and we know the benefits long term cost approximately 36 percent of payroll.

The employees are paying 7 percent, and that leaves 29, and if the employer is paying 7, that leaves 22 percent.

What the legislation does is say that additional cost is a cost to the employer, and there is a rather complex series of provisions made to make sure that that money is there and will be there in the future.

The civil service retirement system in the bottom line, then, is funded about 80 percent by the Government. Only 20 percent by the employees, and the fund is growing, and under current projections will continue to grow. It is now at $100 billion, much larger, in fact, than social security.

Chairman DOMENICI. But for those who would tell us that it is in good shape because they put in 7 and we put in 7, that is not true?

Mr. HUSTEAD. Before 1969 when the current legislation was enacted, those were the only two sources of income. The reason the legislation was enacted was that the fund would have run dry in the 1970's, when they looked at it back then, so they needed new legislation, and if you now look back and say what would have happened without that extra Government financing, that is true. The fund would now be zero, and we would be paying through direct appropriations.

Chairman **Domenici**. Have you seen the administration's recommendations with reference to the Federal employees retirement plan?

Mr. **Hustead**. I haven't seen them directly. I have read about them.

Chairman **Domenici**. What are your observations about them from what you have read?

Mr. **Hustead**. I hope it is just being put there to scare people, to modify the system somewhat. I believe the logic is that the system will not wind up with the employees and the employer paying 11 percent, and there seems to be some statement that that is what the typical private sector plan costs. And that is true, that the typical private-sector employer is paying about 11 percent for retirement benefits, but the employer is also paying 6 or 7 percent for social security, and there are other funds going in.

So you would turn from a system that is now much more liberal and much more expensive than the typical private-sector plan to one that is much less liberal and much less expensive. I think that is going a bit too far.

Senator **Chiles**. Where would the fair line, or midline, be?

Mr. **Hustead**. If the focus is entirely on the retirement plan, and we say we should have a retirement plan in the Federal Government that matches outside, without looking at other benefits or pay, and I think we need to look at all of them, but to focus just on the one aspect, a system that costs between 20 and 25 percent of pay would do it, or alternatively, covering Federal employees by social security and providing a system that is maybe 10 to 15 percent of pay. Either combination would be comparable.

MILITARY RETIREMENT PROGRAM

Chairman **Domenici**. I notice in the administration's proposal another thing. Now, I have not had a chance to ask any of their official spokesmen this question, but you have addressed military pensions quite properly. There is not any fund because it is a general tax fund.

Is there any reason why military pensions shouldn't have some reform if we are going to build it into the other system, even from the standpoint of existing law, that says we really are paying 80 percent out of the general fund for the Federal retirees, which is going to be changed if the President gets his way.

Just from the standpoint of fair retirement policy, shouldn't theirs be altered somewhat, too? Is it not in excess of anything the private sector has, also?

Mr. **Hustead**. Whenever you talk about the military, of course, you have the *x* factor. The military is a group that really can't be compared to a private-sector work force because of the need to maintain a young force. But given that, I think there are two major considerations in the civil service system that apply to military, that cause them to cost more and make them atypical.

One is the early age for retirement, and the other is full indexing, and I think those adjustments could be made in military retirement as well as civilian.

Dr. **Schieber.** I think that if one wishes to take up the issue of the military retirement program, one has to look at what you are trying to accomplish in manpower or personnel management context.

The 20 years and out provisions that now apply to the military actually came into the military in an era some years ago when the composition of the military work force and what it was doing was quite different from today.

It is not clear that one could not look at, under the basic tenets of the military retirement program and possibly reconstruct it somewhat along the lines of a review of the civil service retirement system.

It is not clear to me that we need a military retirement program today that has an average retirement age of 42, where a person goes out with 50 percent of final benefits, and then the majority of them continue to work.

MOVING IN DIRECTION OF PARITY

Chairman **Domenici.** Well, it seems kind of inconsistent. We went through a very arduous task a number of years ago on the All-Volunteer Army, and then we got a national policy saying we are going to move in the direction of parity of pay.

We think we got close. In the process, I don't think we cut many fringe benefits that were there, and we didn't change the pension plan at all.

Dr. **Schieber.** That's correct.

Chairman **Domenici.** I guess the theory of the Federal Government is, we are trying to get parity. There is an argument over whether that is parity or not on the civilian employee side. We are trying to get the parity with the military, in which event it seems that a comparable pension plan ought to apply to both.

Dr. **Schieber.** Well, I think that the *x*-factor, if you will, that Ed Hustead mentioned, is one that you have to consider. There are still very strenuous occupational positions in the military. You may not want 60-year-old men in the 101st Airborne Division, but there is a very large segment of the military work force that is involved in typical blue collar or white collar positions. It is not clear that you want to invest a very substantial amount in them developing their human capital—their capability of doing whatever it is they do in the military—and then when they reach what most private-sector firms would consider their peak, their early forties, to say, "OK, if you leave me now I am going to pay you 50 percent of your salary, and I am probably going to guarantee you better protection against inflation in the future than if you stay with me."

So I think that there are some inconsistencies from a manpower or personnel management perspective in both of these programs that should be looked at very carefully.

RAILROAD RETIREMENT SYSTEM HAS PROBLEMS

Chairman DOMENICI. On the railroad retirement, my staff tells me that there is a short-term cash flow problem in the railroad retirement account that is a significant threat to the capacity for full checks to continue beyond October 1 of this year. Benefits might have to be reduced in 1984, and that amount, although unknown precisely, could be in the neighborhood of $40 a month. Is that true?

Mr. HUSTEAD. That is correct. The railroad legislation is unique among the Federal plans, by providing that if the funds are not sufficient, that as soon as that is realized, benefits will be cut.

There are, I think, some solutions to the problem that need to be looked at very seriously.

One is that there is a big strain on the railroad system from outside. They have a tremendous amount on loan to social security at a given point. It runs into the billions of dollars.

They also have to loan money to the railroad unemployment account, and when the retirement program is in trouble, these funds being tied up means that the problem is even worse. One area of relief that could be done simply is to borrow those two amounts elsewhere.

Beyond that, I think there will be a need for increased employer financing or some reduction in benefits.

Chairman DOMENICI. Well, I think it probably amazes the four of you that all the discussions in the past 10 days, in the state of the Union and the budget itself have centered around, for the most part, around issues that you have not talked about here today. Yet I think you have probably to assume just by knowing the sheer numbers that the future appearance of the Federal budget is more affected by the four programs we talked about here than everything, save military, that has been talked of by every politican for the last 8 or 10 days.

I hope you don't think that because there is not a large attendance here and a lot of cameras we don't know it. We do know it.

But to know it and to be able to solve it is a very difficult thing.

Thank you very much for your assistance.

We stand in recess.

[Whereupon, at 3:30 p.m., the committee recessed, to reconvene subject to the call of the Chair.]

INFRASTRUCTURE AND FEDERAL INVESTMENT

FRIDAY, FEBRUARY 18, 1983

U.S. SENATE,
COMMITTEE ON THE BUDGET,
Washington, D.C.

The committee met, pursuant to notice, at 10:16 a.m., in room 6202, Dirksen Senate Office Building, Hon. Pete V. Domenici (chairman of the committee) presiding.

Present: Senators Domenici, Gorton, and Chiles.

Staff present: Stephen Bell, staff director; William Hoagland, senior analyst for physical resources; Richard N. Brandon, minority staff director; and Lisa Faulkner, analyst for general government and general purpose fiscal assistance.

Chairman DOMENICI. The hearing will please come to order.

OPENING STATEMENT OF CHAIRMAN DOMENICI

The power, importance and prestige of our National Government must not be allowed to obscure the fact that every citizen of the United States is at the same time a citizen of some State, county, town, township, village, borough, or city. It was from the union of States that the National Government originally arose, and notwithstanding the vast powers gathered to the National Government over recent history, its ultimate strength still is derived from strong and financially viable State and local governments.

As we continue our background hearings for the first concurrent resolution on the budget for fiscal year 1984, we must not lose sight of the weakening financial condition of our State and local governments. According to a recent survey conducted by the National Governor's Association and the National Association of State Budget Officers, the States will post an historic deficit of nearly $2.0 billion this fiscal year ending June 30. In such a bleak financial environment, public capital investments projects—traditionally supported by State and local governments—will continue to decline.

A major source of funding for State and local, long-term capital projects has been the municipal securities market. And yet high interest rates over the last few years—generated in part by the large Federal deficits—have crowded out not only private borrowers but also non-Federal borrowers such as State and local governments.

How, we, at the Federal level, balance this difficult task of reducing the large projected Federal deficits, while helping to protect the financial viability for our States and local communities and at the same time begin to address needed public capital investments, is the purpose for our hearing today. We are fortunate to have with us a most distinguished group of experts to address this difficult task.

Our witnesses this morning are well qualified. They represent the continuum in public financing, from municipal securities dealers who raise money daily to fund public capital projects—to the chief executive of a State that must carefully husband his resources to service the capital fund debt.

Our first witness is the Honorable Thomas H. Kean, Governor of New Jersey. Governor Kean in his short tenure as chief executive of New Jersey, has shown great insight into ways the Federal and State governments can work together to leverage limited public resources, and therein meet pressing infrastructure needs.

I am pleased to have sponsored legislation yesterday that used as its model, Governor Kean's State infrastructure bank proposal. I would also note that Governor Kean's State was one of those States in the survey I mentioned earlier that is facing a potential deficit of $77 million this year.

Our second witness, Dr. Petersen is widely recognized for his writings and presentations on matters dealing with State and local finance and financial management. He is currently the director of the Government Finance Research Center here in Washington. We have asked that Dr. Petersen outline for us the current and future financial outlook of State and local governments, and what policies the Federal Government might puruse to foster State and local government's capital investment.

Our third witness, Dr. Roy Bahl is the director of the metropolitan studies program in the Maxwell School at Syracuse University. Dr. Bahl has published extensively in this area, and his latest forthcoming book entitled "State and Local Government Finances in a Changing National Economy" qualifies him uniquely for the task at hand today.

Finally, Arch W. Roberts, chairman of the Public Securities Association represents the municipal securities dealers and dealer bankers who operate on a day-to-day basis underwriting and trading municipal securities. Mr. Roberts is president of his own firm in Gainesville, Fla. We have asked that Mr. Roberts address how alternative Federal policies affect the municipal securities market and therein State and local investment decisions.

We appreciate your willingness to appear before the committee this morning. I would very much appreciate it, if you have prepared statements, that—you can read them, if you like—but they will all be made a part of the record, and that you try to keep your opening remarks to about 10 minutes. We will reserve questions until everyone has completed their statements.

Senator Chiles will be here later on, and he has asked me to insert his prepared statement in the record at this time.

PREPARED STATEMENT OF SENATOR LAWTON CHILES

I would like to join the Chairman in welcoming this distinguished panel here this afternoon and in having the chance to explore an area which I think is absolutely vital to sustained economic growth and to our ability to compete in an increasingly technological world marketplace.

You know, sometimes on the Budget Committee, we have a case of tunnel vision, focusing so much on the deficits that we lose track of some of the longer range issues which are just as important to our economic well being. I hope we can rectify that this afternoon.

This country was founded with a pioneer spirit. Yet, with the shrinking of our physical frontiers, we must be increasingly aware of the need to maintain that spirit, especially as we confront the challenge of international economic competition. It is no longer enough to be strong, we must also be smart. Our ability to compete, not only in the high technology arena, but in such basic industries as autos and steel, depend increasingly on the results of research and development efforts conducted by private industry, universities, and the federal government.

In his state of the union address, the President referred to the need for the federal government to take the lead in restoring the economy. Well, I'm with him on that. And no place is the need for an active government role more evident than in the science area. I was pleased to see in the President's FY 1984 budget that the reductions in research and development that marked the first year of the Reagan Administration have been turned around. Outlays for total research and development, after dropping 1.4 billion dollars in 1982, will increase 3.2 billion dollars in 1983 and another 5 billion dollars in 1984.

Yet, lest we get carried away with this improvement, a closer examination reveals a deeply disturbing trend. Outlays for non-military research and development have dropped steadily since 1981. The President's budget request for FY 1984 is 5 billion dollars lower than we spent for such research in 1981. In that same period, military research has increased by more than 68 percent, a rise of nearly 12 billion dollars.

Further, the increase in outlays for the National Science

Foundation for FY 1984 is a healthy 16 percent above FY 1983 level. Yet in future years, the National Science Foundation budget is frozen. This Administration may have seen the light, but it appears they are unconvinced of the need for a long-term program.

A one-year spurt in research is of little use unless it is backed by a multi-year commitment. I'm afraid that if we are trying to send a signal to universities and private researchers that they should upgrade and expand their efforts, this is the worst way to send it. Why should they embark on such a program when the federal government appears to have no intention to follow through?

While I am concerned at the misplaced priorities in our research funding and in the unsustained commitment to agencies like the National Science Foundation, we also need to examine the level of research activities in relation to our Gross National Product. From 1964 until 1977, this country's total research and development expenditures, as a percentage of Gross National Product, fell from 2.9 to about 2.2. Since that time, it has grown slightly to about 2.4 percent. Yet, that growth has been due almost exclusively to nonfederal investments. Since the mid 1970's, the federal government's contribution to research and development has been a relatively constant 1.2 percent of Gross National Product, about half of the total. President Reagan's FY 1984 budget would do little to change that.

But while the total is about the same, the mix is very different. In 1981, the federal government spent 0.6 percent of Gross National Product on military research and 0.65 percent on civilian research. In the FY 1984 budget, that ratio will change to more than 2 to 1, 0.83 percent to military research and only 0.39 percent to the civilian side.

Among our chief international competitors, the United States ranks low in terms of total civilian research and development as a portion of Gross National Product. West Germany spends about 2.2 percent of Gross National Product on civilian research, both public and private, and Japan, just under 2 percent. The United States, meanwhile, spends less than 1.8 percent. Yet these are the very countries with which we compete most aggressively.

I would like to explore these issues with the panel, as well as others, such as targetting federal research and development funds most effectively, encouraging cooperation among business, universities and federal government research programs, and improving our fundamental technological capabilities. I look forward to your presentations.

Chairman DOMENICI. Governor, would you proceed?

STATEMENT OF HON. THOMAS H. KEAN, GOVERNOR, STATE OF NEW JERSEY

Governor KEAN. Thank you very much, Mr. Chairman.

I have a prepared statement which is before you, but I am not going to take the committee's time by reading it. Instead, as you said, it will be inserted into the record,[1] and I will proceed with a summary of that testimony.

I would also like to introduce Ken Bedeman, the treasurer of the State of New Jersey, who is here with me, and who has been an integral part of our idea for an infrastructure bank.

FINANCING INFRASTRUCTURE

It is indeed a pleasure to be here to testify on what, after all, is one of the most important challenges facing New Jersey and, for that matter, every other State—the need to repair and maintain our basic infrastructure. This problem and more specifically, the problem of how to finance vital public capital projects, is a fundamental one facing all levels of government.

The public continues to demand adequate services and facilities and this, of course, is not going to change. A healthy network of roads and bridges, waterways, and sewers is absolutely necessary to attract and retain the business activity which is going to provide jobs for our people.

INFRASTRUCTURE BANK PROPOSED

In the case of water and sewers, it is necessary also to meet Federal environmental standards. Increasingly, infrastructure development and improvements are looked to as a direct source of jobs in this kind of recessionary economy. Yet both the Federal and State governments lack the revenues to undertake ambitious public expenditure programs. In New Jersey, we believe that we may have come up with an answer. The New Jersey Infrastructure Bank is what we are talking about. The bank is the result of deliberate but radical rethinking of the way we go about planning and paying for these essential underpinnings of the State's economy.

The proposal is the result of a great deal of work, begun very early in my first year as Governor. It involved all sorts of State officials, particularly those in the department of environmental protection, treasury, and transportation, and by experts in public financing from the Wall Street firms of Bayer Stearns and Merrill Lynch.

The plan these groups came up with will provide a permanent source of capital which can be used only for infrastructure projects. The basic concept is to establish a bank which would loan rather than grant funds generated by State obligation bonds and Federal and State appropriations so that they can be used on an ongoing basis over a number of years to finance infrastructure projects. Once funds are appropriated to or deposited in the bank, they will be loaned at low, or very possibly, no interest at all, to the units of government undertaking the construction, rehabilitation, replacement, or the repair of infrastructure. As loans are repaid, New

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[1] See p. 125.

Jersey will have a permanent revolving fund so that money will always be available for the State's basic infrastructure needs.

Our goal is that future generations will be so prepared so that they do not have to face the dilemma which we are all wrestling with today.

I want to stress that the infrastructure bank is not a plan designed only for new construction. Keeping our resources in working order is perhaps even more important than building new facilities, because once facilities deteriorate, the original investment is lost, and the cost of repairing the damages rises greatly every year. This is the reason the infrastructure bank is built on the concept of revolving loan funds.

INFRASTRUCTURE BANK ADVANTAGES

We think the infrastructure bank has several advantages. First, and perhaps of greatest interest to this committee, the bank would reduce greatly the budget strain on the Federal Government, because rather than depending solely on continued Federal appropriations, the bank will in effect recycle the dollars we use so we can use them over and over again. In addition, our plan will allow invested bank capital to grow, thereby gradually reducing demand for additional annual appropriations from either the Federal or the State government.

Further, the bank would reduce reliance on local, tax-exempt bonds, which result in forgone Federal revenue as a source of funds.

Second, our bank would encourage and provide the type of financial planning which would insure that local and county governments have the long-range financing necessary to complete large capital projects. In this way, we can avoid the specter of half-finished projects and massive debts at the local level.

Third, the bank can provide the resources necessary to meet Federal environmental standards, which would otherwise be increasingly difficult in the face of declining Federal funding for such items as construction grants for sewer projects.

Finally and most importantly, it addresses the No. 1 concern of citizens in this country today, and that concern is jobs. Repairing our basic infrastructure is absolutely vital to our ability both as a State and as a nation to provide the services and facilities that businesses need to operate smoothly and to move their products. This is absolutely essential to bringing jobs to our State and to retaining the jobs we have. In addition, a long-term, well-planned infrastructure program will be a major source of jobs in and of itself. Our department of environmental protection has estimated that the level of investment we have proposed in our infrastructure bank, 50,000 jobs can be created in the waste water treatment area alone, and these are jobs that now would not be created under the present system. In our department of transportation, they have predicted that the transportation activities envisioned in the plan can generate another 70,000 jobs.

I believe that we in government have no more important obligation and no more important duty than to work on the creation and maintenance of jobs for the people of this country. If the infrastructure bank in concept can yield 120,000 jobs in the State of New Jersey alone, while at the same time reducing dependence on Federal funding, then in my view, it can be a tremendous success. The amount of money needed to repair and maintain our crumbling infrastructure is just now becoming known, and it is a staggering amount. A recent study by the Port Authority of New York and New Jersey found that at least $40 billion must be spent in the port region alone over the next decade to deal with the problems of our highways, our bridges, mass transit, water and sewer systems. An infrastructure study group of the Joint Economic Committee is now conducting an intensive study of New Jersey and three other States to determine their exact needs. But it is clear that it is going to take a major commitment of resources to get the job done.

PRESENT SOURCES OF FUNDS

In the past, New Jersey, like most States, has relied on just a few sources to finance its infrastructure repairs and improvements. First, the State has provided funds through the proceeds of the sale of general obligation bonds. We have paid for over 2 billion dollars' worth of capital investments with these moneys. We have got to proceed very carefully. New Jersey is the only State in the Northeast, and one of the few in the country, that still maintains an AAA bond rating from both Moody's and Standard & Poor. I am committed to doing everything I can as Governor to maintain that kind of an excellent rating. The State cannot jeopardize its fiscal condition by taking on more State general obligation borrowing to replace funding that the Federal Government is no longer willing or able to supply. And our town and county governments simply cannot pick up the whole burden either, especially in light of the fact that our local governments in New Jersey already have an outstanding debt of $3 billion. The second source of funds in the past has been regular appropriations from State funds, but as with Federal dollars, these funds are not going to necessarily be available at sufficiently high levels every year. Our economic problems in New Jersey are similar to the problems being faced in other States and the problems being faced in the Nation. State revenues have not increased rapidly enough to keep up with the growth of mandated expenses. Our legislators have promised more than they can deliver. Funding for infrastructure improvements is just the type of spending that tends to be cut by legislators as they look to balance our budget.

The Federal Government is the third major source of funds, and we know that you face the same problem. As a result, both the level of funding and the timing of appropriations have been unpredictable. For example, in the waste water treatment area in New Jersey, which has already received $1.8 billion for completed or ongoing projects, is slated to receive a total of $385 million for fiscal years 1982 through 1985. This is only about half the annual level of years prior to 1982. It is estimated that the cost in today's dollars of completing the 237 projects which will be ready for construction in the next 4 years will be $2.4 billion under planned and existing funding levels.

So, under our present system, we would be able to fund only 24 of the existing 237 projects, leaving the other 213 projects unbuilt, and in the process not only not creating jobs, but leaving Federal clean water standards unmet.

INFRASTRUCTURE BANK PLAN

So, under the infrastructure bank plan, we envision a total investment of $10 billion, with about half this amount, or $4.9 billion, over the next 7 years for transportation—$1.3 billion for water supply, $1.6 billion for resource recovery plants to dispose of solid wastes, and the $2.4 billion for waste water treatment.

Under the infrastructure bank plan, we would need a minimum of 4 more years' worth of Federal sewer construction grants at our current level of $100 million per year, giving us a 6-year total of roughly $600 million to begin all of the 237 projects within a 10-year period. Without the infrastructure bank, the existing Federal sewer construction program would have to be continued for at least 15 years at existing levels if all eligible projects in New Jersey were going to be constructed. If inflation were taken into account, the Federal exposure in New Jersey alone could reach $2 billion.

PASSAGE OF FEDERAL LEGISLATION SUPPORTED

To achieve these savings and to make the infrastructure bank a reality, we are requesting passage of certain Federal legislation. First, we support an amendment to the Clean Water Act which would grant us permission to use our obligated funds as low- or no-interest loans instead of as grants; to deposit repayments in the equity fund of the New Jersey Infrastructure Bank, and to recycle the new projects until all of our 237 projects are completed.

Second, we support the Public Investment Incentive Act of 1983, which was introduced yesterday by the chairman of the committee, Senator Domenici, and which is being cosponsored by our distinguished Senator from New Jersey, Bill Bradley. This is exactly the kind of legislation that would make the infrastructure bank most effective. The bill would make available to States which set up bank operations for infrastructure finance a sum of capital which could be used for loans to public agencies for water, waste disposal, resource recovery, transportation, and similar services. The States would manage these funds in accordance with an agreement with the Secretary of the Treasury, who would chair a national infrastructure council to oversee the investment program.

This is the type of initiative which can cure our infrastructure financing problems, because it matches the remedy, dependable funds, and with the level of government best-suited to make it work. This is a very good bill, and we support it.

In short, Mr. Chairman, what I would like to do is invite members of the committee to join me in remolding the Federal-State financial relationship in the interest of rebuilding our crumbling infrastructure. The first step would be passage of the two pieces of legislation which I have just mentioned. I believe that the New Jersey Infrastructure Bank could be a national prototype for addressing two of our most critical problems—the need to rebuild our network of highways, bridges, sewers and waterworks, and the absolute necessity of providing jobs for our people in an era of very limited resources.

I hope that you agree, and I will certainly welcome any questions that you might have.

Chairman DOMENICI. Thank you very much, Governor.

STATEMENT OF GOVERNOR THOMAS H. KEAN
ON
PLANS FOR INFRASTRUCTURE FINANCE IN NEW JERSEY
SENATE BUDGET COMMITTEE
February 18, 1983

Thank you, Mr. Chairman and Members of the Committee. It is indeed a pleasure to be here today to testify about one of the most important challenges facing New Jersey and many other states: the need to repair and improve our basic infrastructure. The problem of financing vital public capital projects is a fundamental one for governments. The public demand for services is unceasing. A healthy network of roads, bridges, waterways, and sewers is necessary to attract and retain business activity which provides jobs for our people. Increasingly, infrastructure improvements are looked to as a direct source of jobs in a recessionary economy. Yet, both the Federal and State governments lack the revenues to undertake ambitious public expenditure programs.

In New Jersey we have given our top attention to a deliberate and significant re-thinking of the way we go about planning and paying for these essential underpinnings of our State's economy--our roads, bridges, water supply, and waste disposal systems. We have proposed a new financing method which can ensure that we always have funds to keep these essential services in running order. This method is embodied in the New Jersey Infrastructure Bank. For this reason I was pleased to accept your invitation to address you today.

The New Jersey Infrastructure Bank will ensure that we will meet the needs of our citizens for economic and physical well-being--a clean, safe environment; adequate and well-maintained transportation systems; the water supply systems; and adequate provisions for disposing safely of sewage and solid wastes. Moreover, it will contribute to the direct creation of jobs and to the retention of businesses which provide jobs in our State.

Background: Infrastructure Development in New Jersey

New Jersey has been going about the job of building its highway, bridge, transit, and water systems for over 300 years. The first highway law in New Jersey was passed in 1675, 100 years before the independence of the United States. Our State was developing even then as a well-traveled corridor between New York and Philadelphia. The old post roads still exist, though in vastly different shape and form. Our original highways and railroads were built with private funds. A portion of our State's present water reservoir complex began its life as a large transportation canal. It was planned in conjunction with a railroad and built by private funds.

Like most states, we were financially independent of the Federal government until just prior to World War I. Like all other states, New Jersey had a tax on motor fuels long before the Federal tax was imposed in 1932. Our State road system, including two significant north-south toll roads, was mainly built with funds generated by State resources. Our water supply and distribution systems were paid for by local governments or private utilities. There has been no massive Federal involvement in water supply in New Jersey as in the western United States. In short, New Jersey developed much of its impressive transportation network and its water supply system without Federal help, and I am proud of that record. Within the past 20 years, we have come to rely, as have other states, on substantial Federal grants. One of the largest such programs has involved Federal grants for construction of wastewater treatment plants. New Jersey moved rapidly to plan and design its wastewater treatment projects in order to comply with the environmental standards mandated under the Federal Clean Water Act. The total Federal investment in these sewerage projects is already $1.8 billion. As you know, however, funding for the Federal sewer construction grants program is currently authorized for fiscal years 1982 to 1985 at only half the level of the previous ten years. During those four years, New Jersey is authorized to receive a total of only $385 million. But we have 237 sewer construction projects which will be ready for construction in the next four years. Their total cost in today's dollars would be $2.4 billion. These projects are both real and necessary. We could begin construction of $1.2 billion worth by this April, if we had the funds. With existing fiscal year 1982 and fiscal year 1983 appropriations, we are able to give partial funding to only 13 of the 237 wastewater treatment projects. Through 1985 we will only be able to fund 11 more. This leaves 213 of the 237 unfunded and unbuilt, and it leaves Federal clean water standards unmet.

Simply cataloging and quantifying the infrastructure problem is a major task. New Jersey is one of four states being studied intensely by a national infrastructure study committee sponsored by the Joint Economic Committee. We await the results of that study, but I am impressed by the sheer number of the dollars estimated to be needed by our own capital planning studies. The Port Authority of New York and New Jersey estimates that at least $40 billion must be spent in the Port region alone over the next decade to deal with the problems of highways, bridges, mass transit, water, and sewer systems. In our Infrastructure Bank plan, which I shall describe in detail momentarily, we have proposed an overall investment of $10 billion to repair and improve our basic infrastructure. Half of this amount, or $4.9 billion for the next seven years, is for transportation, $1.3 billion is for water supply, $2.4 billion is for wastewater treatment, and $1.8 billion is for resource recovery plants to dispose of solid wastes. If we had $10 billion to invest and did so promptly, the need for funds would not disappear. It would be necessary to keep investing in order to keep facilities up to date and to keep pace with the growing needs of our businesses and our citizens. This is the reason we have developed a plan for a bank which will be a permanent source of capital for New Jersey's infrastructure.

Present Sources of Funds for Infrastructure Financing in New Jersey

Currently, the State of New Jersey provides infrastructure financing through the proceeds of sales of State general obligation bonds. We have an investment of over $2 billion in a multitude of capital programs paid for from the proceeds of general obligation bonds. We have proceeded carefully in our capital generation activities; we are now the only state in the Northeast with a triple-A bond rating from both Moody's and Standard & Poor's; in fact, we are one of only nine states to merit this confidence from investors. Most of the others have done this by refraining from issuing state's general obligation debt. I am committed to maintaining our strong bond rating by husbanding our capital generation resources carefully. We cannot jeopardize our fiscal condition by taking on more State general obligation borrowings to replace the funding which the Federal Government is no longer willing to supply. Our counties and municipalities are not in a position to pick up the whole burden either. Local governments in New Jersey already have an outstanding debt of $3 billion. The municipal, county, state, and Federal taxpayer is, after all, the same citizen whose personal resources have been strained by the difficult economic conditions which face all governments.

The ability of New Jersey to use current revenues for capital projects is severely limited. Because of prevailing economic conditions, State revenues are not increasing rapidly enough to keep up with the growth in mandated expenses, a problem which is no doubt familiar to you. While we do include capital expenditures in our budget allocations, we can by no means be sure that these funds will be available at a sufficiently high level every year. These are just the types of budget expenditures which tend to be cut out in the process of balancing demands for funding operating needs of state and local governemnt enterprises.

The Federal Government has also proven to be a source of funds in our quest for a stable, dependable, and continuing flow of capital dollars. The result: Neither New Jersey nor any other state can lay out a long-term solution to meet the basic infrastructure needs of its citizens, its industries, and its institutions under the present circumstances.

The New Jersey Infrastructure Bank Plan

On September 29, 1982, I announced our proposal for the New Jersey Infrastructure Bank as a solution to the dilemma posed by the State's present dependence upon annual capital appropriations by Congress and the State Legislature. The proposal is the result of work begun early in my first year as Governor, by State officials in the Departments of Environmental Protection, Treasury, and Transportation and by experts in public finance from the Wall Street firms of Bear, Stearns and Merrill Lynch.

To direct the planners as they shaped the Infrastructure Bank, these guidelines were provided: a requirement to get the greatest possible use from limited public funds; the need to identify and capture a continuing, reliable, and accessible source of funds; a commitment to minimize the impact of project construction costs on citizens and taxpayers; a policy decision to decrease reliance on general obligation bond financing and a commitment to preserve the State's financial condition.

The plan these groups came up with, the New Jersey Infrastructure Bank, will provide a permanent source of capital which can only be used for infrastructure projects. The basic proposal was to establish a Bank which would loan, rather than grant, funds generated by State General Obligation Bonds and Federal and State appropriations, so that they could be used on an on-going basis over a number of years to finance infrastructure projects. Once funds are appropriated to or deposited in the Bank, they will be loaned to governmental units undertaking construction, rehabilitation, replacement, or repair of infrastructure. The New Jersey Infrastructure Bank is not only a plan designed for new construction. As loans are repaid, New

Jersey will have permanent revolving funds which will insure that funds will always be available for the State's basic infrastructure needs. Our goal is for future generations not to have to face the dilemna with which we wrestle today. Keeping our resources in working order is even more important than building new facilities, because once facilities deteriorate, the original investment loses much of its value. This is the reason the Infrastructure Bank plan builds upon the concept of revolving loan funds.

The Infrastructure Bank would be a State institution within our Department of Treasury and would operate on a non-profit basis. In addition to making loans, it would be empowered to borrow from the capital markets on behalf of localities who wished to use the Bank as a vehicle to raise capital for their share of project costs. And the Bank would serve as a vehicle through which revenue-backed bonds for State Infrastructure purposes could be issued when a source of new or existing State revenue was dedicated to the Bank. For example, transportation financing could be accomplished in this particular way.

Sources of Funds for the NJIB: State Sources

The sources of capital we envision for Bank operations are two: State sources and Federal sources. First, let me discuss State sources. New Jersey voters have approved a number of general obligation bonds for specific purposes. Many of these purposes relate to infrastructure. In particular, we have bonds authorized for water supply system construction and rehabilitation, for wastewater treatment plant construction (funds which we have been adding to the Federal construction grants to reduce the local share of project costs), and for loans for resource recovery projects. In approving the bonds, the voters also authorized debt service on the bonds to be paid by the State General Fund. Thus the bonds when issued carry the full faith and credit of the State of New Jersey. The Infrastructure Bank plan is to appropriate the proceeds of general obligation bonds to the Bank, to be used for loans for the purposes originally authorized, but with the repayments to be made to the Bank. These bond proceeds would become part of the Bank's revolving equity funds.

Another source of State funds could be revenues in the form of user fees. A source of revenue related to a particular type of infrastructure facility, but collected on the State level, may be appropriated, dedicated, or otherwise promised to the Bank for an assured period of time. These revenues would be used to meet principal and interest payments on bonds sold to generate capital funds. The revenue bonds would not be general obligations of the State since they would be secured only by these specific revenues. The purpose of this portion of the Bank's operation would be to generate capital dollars quickly which could be applied to such critical needs as a $500 million backlog of State and local bridge rehabilitation. Our roads and bridges are among the most intensely used in the nation, and we must quickly move to repair the damage caused by this high rate of use and prevent it from worsening.

New Jersey has a gas tax already in place. If a portion of that tax together with other transportation-related State revenues were dedicated to the Bank, ten-year revenue bonds could be sold which would generate as much as $200 million annually for five years for transportation. To keep a flow of capital funds available, an additional source of revenue would be required after five years. The purpose of this plan would be to assure that New Jersey had on hand the $130 million which we will need each year as our matching share of Federal highway and transit funds. It would also assure us of funds for 100 percent State projects and a major State-local aid program.

Sources of Funds for the New Jersey Infrastructure Bank: Federal Sources

The second key source of capital would be Federal funds. This plan for Bank capitalization has initially focused upon Federal construction grants for wastewater treatment plants. As I discussed earlier, New Jersey's authorization under this program is only half what it was prior to fiscal year 1982, or $100 million per year. The State has no prospect of completing the 237 projects which we believe we need to meet Clean Water Act requirements. We are requesting permission to use our obligated funds as low- or no-interest loans instead of grants, to deposit repayments in the equity account of the New Jersey Infrastructure Bank, and to recycle them for new projects until our 237 projects are completed. In order to begin all of the projects within a ten-year period, we will need four more years worth of authorizations at our current level of $100 million per year, which would give us a six-year total of $600 million. In the absence of the Infrastructure Bank, the existing Federal sewer construction program would have to be continued for a least 15 years at existing levels if all eligible projects in New Jersey were to be constructed. If inflation of project costs were taken into account, the Federal exposure in New Jersey alone could reach $2.0 billion.

The "Public Investment Incentive Act of 1983" just introduced by Senator Domenici, the Chairman of this Committee, is the type of Federal action which will enable the New Jersey Infrastructure Bank to be most effective. This bill would make available to states which set up bank operations for infrastructure finance a sum of capital which could be used for loans to public agencies for water, waste disposal, resource recovery, transportation and similar services. States would manage these funds in accordance with an agreement with the Secretary of the Treasury, who would chair a National Infrastructure Council to oversee the investment program.

This is the type of initiative which can cure our infrastructure financing problems because it matches the remedy -- dependable funds -- with the level of government best suited to make it work. The State is in the best position to know its local priorities and to manage its funds to meet them. Although we have taken advantage of Federal conditional grants for specific programs, we have often found that the complexity of the planning and regulatory processes necessary to run such programs on a national level inflate the costs and the time necessary to achieve results. Neither the Federal nor the State and local governments benefit from such a situation. And the taxpayer and citizen suffer the most.

I believe the key to decisions about allocating revenues within a federal system such as ours is to achieve a balance in answering these two questions: which level of government is best able to achieve success in carrying out a particular function, and which level of government is best able to finance that activity? No one will argue that ability to finance is a central determinant of the success or failure of a national, state or local government. The amount of time spent in considering taxes and budgets is clear enough evidence of that. At the same time, there is a tremendous public demand for services placed upon state and local governments, and the truth is that although some are better able than others to meet the demand, the financial burden cannot realistically be met without Federal help.
Where Federal and state policy goals converge, such as in the need for clean water or adequate road and transit systems, it is altogether appropriate for the Federal Government to assist the states in establishing and funding a system which will enable them to accept and carry out responsibility for meeting mutually agreed upon policy goals.

Legislation to create the New Jersey Infrastructure Bank and give it the power to operate was introduced in both houses of our

New Jersey Legislature in October, and work is going on right now to refine those bills so they can be presented for a final vote this spring. Then the Federal-State partnership can to into action.

CONCLUDING REMARKS

In summary, I seek the assistance of this Committee in remolding the Federal-State financial relationship in the interest of rebuilding our infrastructure. I urge you to make an investment in New Jersey's effort by joining with us to capitalize the New Jersey Infrastructure Bank, both by supporting use of Clean Water Act construction grants as loans through the Bank and by making direct allocations of investment capital to the Bank possible, through legislation such as the Public Investment Incentive Act of 1983.

The New Jersey Infrastructure Bank is a potential national prototype for states seeking new approaches to critical needs to construct and repair infrastructure. It is a well-through out, sophisticated and realistic way to deal with a problem common to all states and all regions of the nation. It is a feasible and workable alternative to increased dependence by states upon the Federal Government. It enables Federal participation in broad policy determination without requiring involvement in administration on the local level. It allows states to gain freedom from the uncertainties of amount and timing of Federal funding, and it insures maximum use is made of Federal funds when they are provided.

Although Federal contributions will measurably enhance the effectiveness of a state infrastructure bank, the success of a state bank is not wholly dependent on Federal appropriations. New Jersey's plan will enable bank capital to grow and thus over time reduce the demand on both the Federal and the State coffers for new investments in old infrastructure programs. This is a constructive approach for both the State and the Federal government, neither of which are well-positioned to increase long-term debt indefinitely.

What is the bottom line for Washington? The Infrastructure Bank plan will have a positive effect on the Federal budget. In fact, we have concluded that from the Federal Government's point of view, the Bank will more than pay for itself. By providing a source of funds other than grants, which are an expense to the U.S. budget, or local tax-exempt bonds, which result in foregone Federal revenue, the Bank plan benefits the Federal budget materially.

Local governments will no longer fear that is they are to deal with massive project financing requirements, they will have to bear them on their own or else postpone indefinitely the required work until one day a grant or subsidy become available. The ultimate benefits will be to the citizen and taxpayer who will not need to face either the onerous taxes or user charges necessary to finance projects when no help is available or a substandard quality of life in the face of decayed and dangerous public facilities. We estimate that 50,000 jobs can be created through implementation of our wastewater treatment plant construction plan and 78,000 jobs by implementing our transportation capital plan.

New Jersey has taken a first step in proposing a solution to the problem. I hope you will assist me in making our plan a reality.

REVOLVING MONEY CAN ALSO BE SPECIFIC

Chairman **Domenici**. I have just one quick question which concerns your program. If the Clean Water Act were amended to let New Jersey use money in its bank, would it operate functionally if that had to be restricted to use in the same kind of projects that are contemplated by the basic law?

Governor **Kean**. Yes.

Chairman **Domenici**. You have figured that into your initiative?

Governor **Kean**. Yes, we have.

Chairman **Domenici**. So, while it is flexible, that kind of revolving money can be also specific; it goes only to the same kinds of projects that would have been approved by the State for funding under the present grant program?

Governor **Kean**. That is accurate. We are planning to go on exactly the same list; we are not planning to change the priority list at all.

Chairman **Domenici**. Dr. Petersen, Director of the Government Finance Research Center in Washington.

Dr. Petersen, we welcome you.

STATEMENT OF JOHN E. PETERSEN, DIRECTOR, GOVERNMENT FINANCE RESEARCH CENTER

Dr. **Petersen**. Thank you, Senator.

I speak today in my own behalf, and my views do not necessarily reflect the policies of the Government Finance Research Center, which I run, or the Municipal Finance Officers' Association.

CAPITAL SPENDING AND FINANCING

The problems of the unmet capital needs and deteriorating condition of public capital stock have received widespread attention. The causes are complicated, but may be distilled into the following: Because of changed political priorities that place emphasis on current spending, persistent fiscal restraint at all levels of Government, and disruptive credit market conditions, States and localities have not been spending enough on the repair and replacement of public facilities. State and local capital spending, which grew during the decades of the fifties and sixties, declined in real terms throughout the seventies and has been particularly depressed in the early 1980's.

Since 1968, State and local government capital investment in constant dollars has fallen by one-third, using 1972 dollars, from a high of $35.9 billion to $23.6 billion in 1981. Measured in per capita constant dollars, State and local public works investment declined from $179 in 1968 to $103 per person 13 years later. This is not a recent problem. It is one we have come to acknowledge recently, but the problem is one of longstanding trends.

Judging by the most recent construction data, State and local spending on capital items has sunk even further over the past 2 years of the 1980's, with spending levels in current-dollar terms running more than 10 percent lower in 1982 than in 1980. This reduction in capital outlays is going on now, despite the widespread press attention. Knowing about a problem does not necessarily give us the wherewithal to do much about it.

Examining the means of financing capital facilities provides insights, I believe, into the current difficulties. The last 20 years have marked a trend away from the use of own-sources by States and localities, and—in particular—that of debt financing, and toward greater reliance on grants from the Federal Government. As budget priorities shifted to meet current services and transfer payment needs, Federal grants to States and localities for capital purposes, while nominally growing, failed to keep pace with the explosive growth in grants for noncapital purposes.

Moreover, capital grants were typically episodic and "single-shot" efforts, providing for initial investments in major new projects and not oriented toward providing a financial or institutional base for the subsequent problems of operating and preserving the capital infrastructure once it was put in place.

By the last half of the 1970's, it is our estimate that States and localities depended on Federal grants to finance 35 to 40 percent of their capital spending, therefore rendering this component of their spending highly vulnerable to changes in Federal grants policy.

MORE RELIANCE ON OWN SOURCES OF FINANCING

Now, the recurring budgetary cutbacks at the Federal level are withdrawing a major source of capital funds. This process is going to take time to materialize in terms of reduced aid flows and spending; but, it is clear that as a result, States and localities will be forced to rely more heavily on their own sources of financing. Such a reliance on their own sources boils down to a greater use of current revenues or more debt financing.

On the current revenues side of the equation, prolonged fiscal pressures brought on by a wave of homegrown tax and expenditure limitations have tainted and made difficult increasing any resource allocations to Government. Moreover, several years of sluggish economic growth have further depressed current revenues and rendered them of very limited help in meeting capital needs. In fact, the demands on current budgets to keep Government operations going in the face of insufficient and erratic revenues have further restricted capital spending by reallocating to current uses funds that otherwise might be used for capital purposes.

So this really leaves us with the remaining alternative, and that is State and local government should rely increasingly on borrowing to finance their capital needs. But unfortunately, many of the same economic circumstances that have led to the deteriorating support for capital spending from Federal grants and out of current revenues have reflected themselves in very unstable credit market conditions, making borrowing a volatile and expensive means of raising funds for capital projects. It is the adverse conditions in the financial market, against the backdrop of unmet capital needs, both public and private, and scarce resources on the current accounts, that form the primary basis for the surge of creative activity in the realm of State and local capital finance. I think the New Jersey Infrastructure Bank is perhaps another generation of creative thinking in these terms. I would like to submit to the committee a copy of a paper on creative financing techniques which I have done, which discusses both the opportunities and limitations of these new techniques. I would like to submit that for the record.

Chairman DOMENICI. It will be made a part of the record.[1]

Dr. PETERSEN. Thank you.

CHANGES IN THE MUNICIPAL BOND MARKET

Not all State and local governments, however, can be considered victims of high interest rates. For some, the high rates of interest were a source of substantial revenues. Those with sufficiently flexible cash management policies and investible assets made out very well, indeed, by investing their money in short-term taxable market instruments at record rates of return. Furthermore, the availability of high reinvestment rates no doubt actually encouraged borrowing by certain issuers that were able to take advantage of the sizable opportunities for arbitraging—that is, borrowing at high tax-exempt rates and reinvesting the proceeds at taxable rates that were higher yet. But I do not want to overdraw those activities. As a matter of fact, by and large, when it comes to capital financing and meeting real capital needs, the high rates have been a deterrent to capital spending.

Now, in my written testimony, I document a combination of cyclical and secular factors that have brought rapid and radical changes to the tax-exempt market over the last few years. State and local governments have shared the difficulties of high interest rates and recessionary conditions that now burden all sectors of our economy. But governments have come in for some very special problems. These difficulties arose in large part from simultaneous changes in the Federal Tax Code, reductions in Federal budgets, and of course, the impacts of recession on revenues. To these changes, which reduced investor demand for tax-exempts and yet made access to that market even more important, must be added the pressures brought on by restrictive monetary policy and a continuing growth in private-purpose borrowing. During the recent high-interest rate periods, the latter swelled the supply of the tax-exempt securities in the midst of weak demand for such securities, particularly in the long maturities.

As a group, such nontraditional borrowers, which constitute anywhere from 25 to 50 percent of all tax-exempt borrowings, are powerful competitors with traditional governments for investment dollars; and, in fact, in the realm of creative capital financing, such nontraditional financing purposes are typically much better-suited to employ the flexibilities required in assuming the risks entailed in the new financing approaches than are traditional, governmental-purposes borrowers, especially smaller and less-sophisticated entities.

IMPACTS OF THE TAX ACT OF 1982

In my written testimony, I talk about the impact of the two recent tax acts, in particular. I would like to take a minute or two to look at the Tax Act of 1982.

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[1] See p. 231.

Starting in late summer of 1982, the bond markets enjoyed a rally as interest rates began to decline under the twin influences of an increasingly depressed economy and relaxation of monetary policy on the part of the Federal Reserve Board. Despite a flood of new issues, tax-exempt bonds followed the general trend, with especially good recovery in the short-term area of the market. However, the longer term prospects for the market continue to be, at best, complicated. Complicating factors are the implications of once again altered tax treatments and the continued weakness on the part of institutional investor demand for taxes on securities and hence, a continued, heavy reliance on the household-oriented retail market.

According to the Federal Reserve flow of funds, if you combine in the household sector, that is, individual investors, unit trusts, bank-administered trusts, and mutual funds, all of which is considered the retail market—you are talking about entities that absorb over 80 percent of the net increase in volume of tax-exempts last year. (That is as of the third quarter, using through third-quarter statistics.) That is a radical change from the municipal bond market, which was a very institution-oriented market, and frankly, that development makes it a more expensive market in which to borrow.

The 1982 Federal Tax Act further changed the status of municipal securities and that of alternative investments with which they compete, in a variety of ways. Two of the changes in the Tax Code most likely will spell higher costs for municipalities over the intermediate and longer haul—first of all, the partial removal of the deductibility of bank interest costs used to finance tax-exempt securities, and second, the requirement that all municipal bonds issued after July 1, 1983, be in registered form.

Again, in the written testimony, I describe certain other aspects of the Tax Act that have had an impact on the market. But, I really want to make a point: that is, that we can talk about the involvement or noninvolvement of the Federal Government in the tax-exempt market, but the fact of the matter is that the Federal Government is highly involved in the tax-exempt securities market because the basic value of the securities rides to their treatment in the Federal Tax Code. So, whenever a tax-writing committee gets the chills, you will find that the municipal bond market will get pneumonia—a great deal of fear and consternation—because the conditions and operations of that market and the major investors are going to be controlled by their treatment in the Federal Tax Code.

MAJOR CREDIT CONCERNS

I do not think any discussion of the municipal bond market would be complete without discussing some of the major credit concerns that pervade the market. The financial condition of the State and local sector has deteriorated over the past 2 years, and yet, the volume of tax-exempt borrowing has greatly accelerated, and there remains a huge backlog of unfunded capital spending.

The rating agencies are certainly aware of the financial problems of governments and have been busily lowering ratings to reflect the more perilous prospects of governmental issuers. Moody's Investor Service, for example, reduced the credit rating of nearly twice as many tax-exempt bond issues as had their rating increased during the first 8 months of 1982, and the 384 downgradings during this period were more than four times as many as reported for all of 1979. So the experts in terms of credit analysis are telling us that we are dealing with weaker credits, and according to the latest reports that we have, that dismal view of the prospects of creditworthiness is continuing to hold forth. I do not think the near-term prospects for ratings are much better. We have growing concerns about the overall creditworthiness of State and local governments, perhaps best personified by the current concerns having to do with Washington public power supply system.

NO LIMIT TO SIZE OF TAX-EXEMPT MARKET

Well, let me underscore a few important points before I stop talking. First of all, I do not think there is any limit to the size of the tax-exempt market. I believe that most anything in any volume can be sold "at a price," but I want to underscore that it is "at a price." The volumes have been very high, and long-term rates, relatively speaking, in tax-exempt securities, have stayed very high. I am an unreconstructed advocate of the belief that whenever you increase the supply of securities in the market, given a limited demand, you will increase the interest cost in that market.

Second, the small, traditional issuers face problems—major problems, in my opinion—of market access. Most lack the size and sophistication to market their bonds in the new, exotic markets as effectively as they used to be able to.

Third, less debt is being floated on its own credit bottom. There is a proliferation of guarantees and lines of credits and letters of credits and so forth. And I am not really convinced that it is all absolutely necessary. To some degree, this development drops back to the fact that we have a larger retail market, and individual customers feel more comfortable seeing somebody's backup on the paper rather than taking the paper on its own credit standing.

Despite the temporary cyclical problems of the State and local governments, the fact of the matter is that municipal bonds, by and large, are extremely good, extremely strong investments, and second only in their default record to the U.S. Government.

The Federal Government is heavily involved in the tax-exempt market because that market rides on the back of tax policy. I think that any consideration given to changing taxes and varying tax treatment should always be reflected upon as to the unwanted, collateral splash effects they visit upon the financial markets in general and with the municipal bond market, specifically, if we really are concerned about financing infrastructure.

With that, Mr. Chairman, I conclude my testimony. Perhaps we will get into some discussions later on.

Thank you very much.

Chairman **Domenici**. Thank you very much, Doctor.

PREPARED STATEMENT OF JOHN E. PETERSEN

Capital Spending and Financing

The problems of the unmet capital needs and deteriorating condition of public stock have received wide-spread attention.[1] The causes are complicated, but may be distilled to the following: Because of changed political priorities that have put emphasis on current spending, persistent fiscal restraint at all levels of government, and disruptive credit market conditions, states and localities have not been spending enough on the repair and replacement of public facilities. State and local capital spending, which grew during the decades of the fifties and sixties, declined in real terms throughout the seventies and has been particularly depressed in the early 1980's.

Since 1968, state and local government capital investment in constant 1972 dollars has fallen by one-third, from a high of $35.9 billion to $23.6 billion in 1981.[2] Measured in per capita constant dollars, state and local public works investment declined from $179 per person in 1968 to $103 per person 13 years later. Capital expenditures make up a diminishing share of total outlays of state and local governments: in 1960, state and local governments spent 27.1 percent of their budgets on infrastructure; by 1980, they were spending only 15.4 percent on capital items. Judging by the most recent construction data, state and local spending has sunk even further over the first two years of the 1980's, with spending levels in current-dollar terms running more than 10 percent lower in 1982 than in 1980.[3]

Examining the means of financing of capital facilities provides insights into the current difficulties. The last 20 years have marked a trend away from the use of own-sources by states and localities and, in particular, that of debt financing, and towards great reliance on the Federal government. As budget priorities shifted to meet current service and transfer payment program needs, grants to states and localities for capital purposes -- while nominally growing -- failed to keep pace with the explosive growth in grants for noncapital purposes. Moreover, capital grants were typically episodic and "single-shot" efforts, providing for initial investments in major new projects and not oriented toward providing a financial or institutional base for the subsequent problems of operating and preserving the capital infrastructure once in place.

Table 1 provides a broad perspective on the sources of funds used to finance state and local capital outlays and reflects a general ebbing in the importance of long-term debt and its replacement by Federal grants. By the last half of the 1970's, states and localities depended on Federal grants to finance an estimated 35 to 40 percent of their capital spending, therefore rendering this component of their spending highly vulnerable to changes in Federal grants policy.4/

The recurring budgetary cutbacks at the Federal level are now withdrawing a major source of capital funds. While this process takes time to materialize in terms of reduced aid flows and spending, it seems clear that, as a result, state and local

TABLE 1

STATE AND LOCAL CAPITAL OUTLAY FINANCING

Percentage Composition of Sources of Funds

	1952-57	1960	1970	1977	1980
Long-Term Debt:	56.0%	37.1%	51.0%	43.3%	37.0%
Federal Aid:	8.5	20.0	22.0	32.1	36.0
Other Sources:	35.5	42.9	27.0	24.6	27.0
TOTAL	100.0	100.0	100.0	100.0	100.0

Sources: 1952-57 Alan Manvel, "State and Local Government Financing of Capital Outlays" in *State and Local Public Facility News and Aiming*, Joint Economic Committee (December 1966). Data for the subsequent years: George Peterson, "Capital Spending and Capital Obsolencence" in Roy Bahl's *The Fiscal Outlook for Cities*, Syracuse University Press, 1978, and authors' estimates for 1980.

governments will be forced to rely more heavily on their own sources of financing. Such a reliance on own sources boils down to greater use of current revenues or more debt financing. On the current revenues side of the equation, prolonged fiscal pressures were brought on by a wave of home-grown tax and expenditure limitations that tainted and made difficult increasing any resource allocations to government. Moreover, several years of sluggish economic growth further depressed current revenues and rendered them of very limited help in meeting capital needs. In fact, the demands on current budgets to keep governmental operations going in the face of insufficient and erratic revenues have further restricted capital spending by reallocating to current uses funds that otherwise might have gone to capital purposes.5/

This leaves the remaining alternative: State and local governments should rely increasingly upon borrowing to finance their capital needs. But, unfortunately, many of the same economic circumstances that have led to the deteriorating support for capital spending from Federal grants and out of current revenues have reflected themselves in very unstable credit market conditions, making borrowing a volatile and expensive means of raising funds for capital projects. It is the adverse conditions in the financial market -- against the background of unmet capital needs, both public and private, and scarce resources on the current accounts -- that form the primary basis for the surge of creative activity in the realm of state and local capital finance.

But it is not only the dire want of conventional capital-financing avenues that have led the tax-exempt market to devise new vehicles. In a more positive vein, the market has been changing by opening up new sources of capital -- investors that are ready and willing to part with their savings if their particular needs can be met. Thus, in the teeth of record high interest rates and intense uncertainty about the future (and because of it, too), tax-exempt issuers were able to tap the short-term market and were able to benefit by burgeoning demand for tax-exempt short-term paper.

Correspondingly, not all state and local governments can be considered victims of high interest rates. For some, the high rates of interest were a source of substantial revenues. Those with sufficiently flexible cash management policies and investible assets made out very well indeed by investing their money in short-term taxable market instruments at record rates of return.6/ Furthermore, the availability of high reinvestment rates no doubt actually encouraged borrowing by certain issuers who were able to take advantage of the sizeable opportunities for arbitrage -- borrowing at high tax-exempt rates and reinvesting the proceeds at taxable rates that were even higher.7/

Changes in the Municipal Bond Market

A combination of cyclical and secular factors have brought rapid and radical changes to the tax-exempt market over the past few years. State and local governments have shared the difficulties of high interest rates and recessionary conditions that now burden all sectors of our economy. But governments have come in for some special problems over the last year. These difficulties arose in large part from simultaneous changes in the Federal tax code, reductions in the Federal budget commencing, and the impacts of recession on revenues. To these changes, which reduced investor demand for tax-exempts and yet made access to that market even more important, must be added the pressures brought by restrictive monetary policy and a continuing growth in private-purpose tax-exempt borrowing. The latter swelled the supply of the tax-exempt securities in the midst of weak demand for such securities, particularly in the long maturities.8/

The pressures in the tax-exempt market can probably best be measured by comparing its cost of capital to those in the taxable market. Over the past two years, the value of tax exemption as a means of reducing interest rates has been severely eroded. As a consequence, the borrowing costs for state and local governments have risen faster than the general rise in interest rates.9/ As Table 2 shows, tax-exempt rates shifted from a historic range of 65 to 70 percent of comparable taxable bond yields up to 80 to 85 percent in the long-end of the market in late 1981 and early 1982. (The second half of 1982 brought a substantial downdraft in rates; but, the ratio of rates remained close to 80 percent.)

Changes enacted in the Economic Recovery Tax Act of 1981 (ERTA) contributed to systematically higher interest rates for municipal bonds.10/ Several provisions of ERTA relating to indi-

TABLE 2

LEVELS AND RATIOS OF INTEREST RATES: BOND BUYER 20 BOND INDEX (TAX-EXEMPT),

MOODY'S ALL-INDUSTRY CORPORATE BONDS (TAXABLE)

1978 to 1982.IV

Year/Quarter	Bond Buyer 20 Bond Index (Tax-Exempt)	Moody's All Industry Corporate Bonds (Taxable)	Ratio of Tax-Exempt To Taxable (%)
1978 (yr.)	6.07%	9.07%	66.0%
1979 (yr.)	6.53	10.12	64.5
1980/I	8.56	12.80	66.9
1980/II	7.86	12.32	63.8
1980/III	8.79	12.30	71.5
1980/IV	9.61	13.67	70.3
1981/I	9.97	14.09	70.8
1981/II	10.68	14.89	71.7
1981/III	12.03	15.65	76.9
1981/IV	12.59	15.64	80.5
1982/I	12.96	15.95	81.3
1982/II	12.19	15.55	78.4
1982/III	11.06	15.03	73.6
1982/IV	10.14	13.49	75.2

Source: Resources in Review, Government Finance Research Center, Municipal Finance Officers Association.

vidual taxpayers had adverse consequences for tax-exempt interest rates relative to those on taxable securities. Among these were the following:

- Reduction of personal income tax marginal rates, especially the lowering of the top-bracket rate from 70 percent (on unearned income) to 50 percent for all income. The rate reductions are scheduled to continue at a rate of 10 percent a year, with indexation commencing in 1985. Thus, starting in late 1981, the long-term prospects were for progressively lower rates into the future.

- Reduction in the capital gains rate, which dropped from a maximum of 28 percent to 20 percent. Over the long-haul, this change should accent the attractiveness of holding equities in comparison to fixed-income securities, such as municipal securities, a particularly important trade off in the case of wealthy investors.

- Expansion of various competing income-sheltering opportunities in individual retirement savings plans (IRA and Keogh), the partial exemption of interest income, the Utility Dividend Reinvestment Program, and the creation of the All Savers Certificate. The latter wrinkle represented a widely available tax-exempt, short-term instrument that was federally guaranteed.

On the corporate tax side of the ledger, the following provisions in the ERTA tax law appeared to have adverse impacts on tax-exempt issuers:

- Rapid expansion under ERTA of leasing tax shelters (the Safe Harbor provisions). This change permitted firms to sell tax benefits to the highest bidder, thus creating billions of dollars of tax-shelter investment opportunities to compete with tax-exempt securities.

- Increase in the Investment Tax Credit (ITC) and Accelerated Cost Recovery schedules (ACRS). These steps generally enhanced the after-tax economic rate of return on private investments, thus lessening the need for tax shelter from municipal securities because less income would be subject to taxation.

Reducing the need for shelters and expansion of income sheltering opportunities available to individuals and corporations proved to be especially ill-timed. In further reducing investor demand for municipal securities, the 1981 tax laws compounded several longer-term problems caused by generally poor economic conditions -- recession and high interest rates -- and changing investment objectives. Demand for tax-exempt bonds by the two major institutional investors, namely commercial banks and property/casualty insurance companies, practically evaporated after 1979 due to poor profitability and the availability of competing tax shelters. Commercial banks, since the early 1970's, have been shifting portfolios away from tax-exempt bonds. Through much of the decade this shift was offset as property and casualty insurance companies increased demands and kept the long-term tax-exempt market buoyant. Banks and insurance companies together in the late 1970's acquired 80 to 90 percent of net increases in municipal bonds. But, these institutions have shown only minimal interest in tax-exempts since 1980. In both cases, the immediate culprit was the reduced profitability of doing business. Property and casualty underwriting losses have grown to high levels, with only slow recovery in prospect.

The reaction of the tax-exempt market to the withdrawal of the institutional investors has been traditional and that is in the heavy reliance on individual investors to absorb the supply of new tax-exempt securities. The percentage of outstanding tax-exempt debt held by individuals and mutual funds shot up in 1981 and 1982. According to flow-of-funds figures through the third quarter of 1982, the household sector and mutual funds have absorbed about 80 percent of the new supply of tax-exempt debt that year.11/

Helping to mobilize individual investment has been the meteoric growth in investments by tax-exempt funds. Particularly important has been the growth in the tax-exempt money market funds, which have created a strong demand for short-term tax-exempt paper.12/ During 1981, tax-exempt money market holdings grew by $3 billion, which represented approximately three-fourths of the increase in outstanding tax-exempt short-term debt reported for that year. By the end of 1982, they were $13.2 billion in aggregate holdings.13/

Issuers -- facing high long-term interest costs -- have willingly shifted their borrowings to the short-term market, often devising new instruments tailored to matching the needs of the funds for highly liquid tax-exempt securities. The growing importance of short-term borrowing -- both proportionately and in dollar terms -- is depicted in Table 3. The sales figures in that table do not tell the whole story of shortened maturities: many nominally long-term bonds sold have taken on the characteristics of short-term obligations. As a result, the degree of the shortening of the liability structure of governments is probably greatly understated by the trends shown in Table 3.

Any examination of the changes in the municipal bond market would be incomplete without reference to the heavy demands placed on the market by nontraditional uses of funds. Over the last decade, a myriad of tax-exempt borrowing devices have been created, designed to raise money at tax-exempt rates which, in turn is relent to the private sector for such things as industrial and commercial development, power facilities, student loans, hospitals, and mortgages on private dwellings. Such borrowing, generally considered as forms of industrial revenue bond financing, as late have represented (depending on the

TABLE 3

STATE AND LOCAL GOVERNMENT DEBT SALES 1978-1982

Year	Long-Term	Short-Term	Total	Short-Term as Percentage of Total
1978	$46.2	$21.6	$67.9	31.8%
1979	42.3	20.9	63.2	33.1
1980	47.1	26.5	73.6	36.0
1981	46.1	34.4	80.6	42.7
1982p	73.6	44.8	119.0	37.6

p preliminary data

Source: The Bond Buyer

definitions employed) somewhere between 25 and 50 percent of all long-term tax-exempt financing.14/

As a group, such non-traditional borrowers are powerful competitors with traditional governments for investment dollars. In fact, in the realm of creative capital financing such nontraditional financing purposes are much typically better suited to employ the flexibilities required to assume the risks entailed in the new financing approaches than are traditional governmental-purpose borrowers, especially the smaller less sophisticated entities.15/

Impacts of the Tax Act of 1982

Starting in late summer of 1982, the bond markets enjoyed a rally as interest rates began to decline under the twin influences of an increasingly depressed economy and a relaxation of monetary policy on the part of the Federal Reserve Board. Despite a flood of new issues, the tax-exempt bonds followed the general trend, with especially good recovery in the short-term area. However, the longer term prospects for the market continued to be at best, complicated. Complicating factors are the implications of once-again altered tax treatments and the continuing weakness on the part of institutional demand and, hence, continued heavy reliance on the household-oriented "retail" market.

The 1982 Federal Tax Act (TEFRA) further changed the status of municipal securities (and that of alternative investments) in a variety of ways.[16] Two of the changes in the tax code most likely will spell higher costs for municipals over the intermediate to longer-haul: the partial removal of the deductibility of bank interest costs used to finance tax-exempt securities and the requirement that all municipal bonds issued after July 1, 1983, be in registered form.[17]

Several other areas affected by TEFRA -- the changes in the restrictions on the use of industrial revenue and municipal mortgage bonds, the new taxation rules for life insurance companies, curbing of the leasing provisions, and the tightening-up of the use of certain competing tax shelters and their subjugation to a revised minimum income tax (that excludes tax-exempt interest income) -- the ultimate impacts constitute a mixed, but most likely negative, picture. Overall, there appears to be little reason to believe that the tax-exempt market's position relative to the other markets has improved or that its more volitile, credit-sensitive behavior will be materially altered. Perhaps one of the more frustrating developments over the past few years is the extent to which the entire municipal securities market has become ultra-sensitive to changes -- real or potential -- in the Federal tax code. For example, the pendency of the bond registration requirement and the year-end effective date for the new interest deduction requirements greatly accelerated tax-exempt issues at the end of the year. The same rush to the market is occurring in the case of the latest creative twist, the FSLIC/FDIC-insured bond: $750 million have been sold since October of 1982. Congress and the Administration are already taking aim at its extinction.[18]

No discussion of the municipal bond market and its ability to raise capital for state and local governmental needs would be complete without a discussion of the current major credit concerns that pervade the market. The financial condition of the state and local sector has deteriorated over the past two years, and yet, the volume of tax-exempt borrowing has greatly accelerated; and there remains a huge backlog of unfunded capital spending needs. The rating agencies are certainly aware of the financial problems and have been busily lowering ratings to reflect the more perilous prospects for governmental issuers. Moody's Investors Service Inc. reduced the credit rating of nearly twice as many tax-exempt bond issuers as had their rating raised during the first eight months of 1982. The 384 downgradings during this period were more than four times as many as were reported for all of 1979.[19]

Near term prospects for ratings appear to be no better, and a major default or two could intensify a flight to quality by investors.[20] Credit concerns may come to preoccupy the market if the Washington Public Power Supply situation is not resolved.

A default on that security could lead to massive problems for all tax-exempt issuers that have relied on so-called "take-or-pay" act clauses to provide security for their bonds.

NOTES

1/ For popular treatments of the subject, see "The Crumbling of America," Time (April 27, 1981); "The Decay That Threatens Economic Growth," Business Week (October 18, 1981; "The Decaying of America," Newsweek (August 2, 1982); and "To Rebuild America -- 2,500,000,000 Jobs," U.S. News and World Report (September 27, 1982).

2/ Government Finance Research Center, Financing Infrastructure for Economic Development. Washington, D.C.: Municipal Finance Officers Association (Draft paper, January 1983), page I-11.

3/ See John E. Petersen, "Financial Roundup: In the Belly of Recession." Resources in Review, March 1983 (forthcoming), page 5.

4/ See John E. Petersen, "Financial Roundup: Public Capital Crisis?" Resources in Review, July 1982, page 5.

5/ In fact, the occurrence of large operating deficits and cash flow shortages have switched current operating budgets from capital fund providers to demanders of credit, increasing the competition for funds in the market.

6/ See Philip Dearborn, "Financial Roundup: When Government Is Both A Lender and A Borrower." Resources in Review, November 1982.

7/ The reinvestment opportunities of tax-exempt proceeds are limited by Section 103(c) of the Internal Revenue Code that provides generally that bonds issued by states or localities will be arbitrage bonds (and the interest on them not tax-exempt) if the proceeds are expected to yield "materially higher" than the yield on the bonds. Numerous exceptions are found including that for construction projects, the reinvestment yield is unrestricted for a temporary period of up to 3 years. Also, other questions of arbitrage depend greatly on the expected use of proceeds and the regulations permit issuers to execute certificates about the use of proceeds at the time of issuance. For an extensive discussion see Frederic Ballard, ABCs of Arbitrage (Packard Press, 1981 Revision).

8/ For recent reviews of the changes in the tax-exempt market and their causes and implications, see John E. Petersen, Has the Municipal Bond Market Undergone Fundamental Change? Washington, D.C.: Government Finance Research Center, May 1982.

9/ For a recent discussion of the changing ratios of tax-exempt and taxable rates and their policy implications, see David Beek, "Rethinking Tax-Exempt Financing for State and Local Governments." Quarterly Review, Federal Reserve Bank of New York (Autumn 1982), pages 30-40.

10/ A discussion of the impact of ERTA's provision on the municipal bond market is found in the testimonies of Messrs. Petersen, Altman, and Trent in U.S. Congress, Joint Economic Committee, Chaos in the Municipal Bond Market, Washington, D.C.: Government Printing Office (1981).

11/ Board of Governors, Federal Reserve System, Flow of Funds Accounts Third Quarter 1982.

12/ See John Fitzgerald, "Localities Rush to Short-Term Market for Funds." The Daily Bond Buyer, May 1981, page 1.

13/ Investment Company Institute. Because of debt reporting and classification difficulties, it is hard to say how much of total short-term debt this represents. However, the $10 billion increase in holding during 1982 represented approximately 17 percent of the approximately $60 billion increase in total state and local government debt outstanding.

14/ See John E. Petersen, The Municipal Bond Market: Recent Changes and Future Prospects. Washington, D.C.: Government Finance Research Center, January 1981.

15/ For an extended discussion of the new creative devices, see John E. Petersen, "Creative Capital Finance." Public Budgeting and Finance in the State and Local Sector (Winter 1982), pages 73-89.

16/ John Bates and Robert Doty, The Impact of 1982 Federal Legislation on Tax-Exempt Financing. New York: Sorg Printing Company (1982).

17/ For a discussion of these changes and their impacts, see John E. Petersen, "Municipal Bonds in Registered Form: What It Means, How It Works." Resources in Review (November 1982); and "The Impact of the Corporate Minimum Tax on Tax-Exempt Bonds." Governmental Finance (Fall 1982).

18/ Joe Mysak, "California County Planning $300 Million FSLIC-Backed Housing Bond Issue." The Bond Buyer (February 16, 1982), page 1.

19/ "Market & Investments: The Specter Haunting Municipal Bonds." Business Week (November 29, 1982), pages 89-90.

20/ "Financial Roundup: Credit Analysts Look to 1983." Resources in Review (January 1983), page 5.

Chairman **Domenici**. Dr. Roy Bahl, director of metropolitan studies, Maxwell School, University of Syracuse, Syracuse, N.Y.

Welcome, Doctor.

STATEMENT OF DR. ROY BAHL, DIRECTOR, METROPOLITAN STUDIES, MAXWELL SCHOOL, SYRACUSE UNIVERSITY

Dr. **Bahl**. Yes, thank you.

I will try not to repeat some of what I heard earlier, but do want to make a few points based on my written testimony. You asked that we address the issue of the Reagan budget and its implications for financing State and local government infrastructure investment. I have three things to say. First, that this proposed budget and the one before it, and probably the next one, will dampen the investment by State and local governments for two reasons. One is that there are fewer resources available because of less Federal aid and because the economy is not growing; and second, capital spending has become a very low priority for State and local governments.

The second point is that all Federal aid cuts, no matter what they are for, are somehow fungible and roll out into reduced investment by State and local government for capital facilities. Third, the administration's program substitutes private sector investment for public sector investment. It has made a kind of a tradeoff that likely will slow the overall growth in the economy.

What I would like to say about policy is that one ought to raise some questions about whether this is the time to deal with the infrastructure problem. In fact, the economic timing could not be worse and we have not done our homework on this subject. There are many things that we need to know before we begin to formulate a reasonable policy to deal with this problem.

Chairman **Domenici**. I did not get the gist of that sentence. What is being done at the worst possible time?

ADMINISTRATION'S PROGRAM AND PUBLIC INFRASTRUCTURE

Dr. **Bahl**. It is not the time to address the infrastructure problem; State and local governments have other needs that may have higher priorities.

First, the point about the administration's program. There was a lot of appeal to what they had to say about new policy directions during the campaign. There was the problem of productivity lag and the need to stimulate investment in the private sector. Tax cuts to do that did not really sound like too bad an idea. The thrust was right. But what of the productivity related to State and local government investment? Even though the administration recognizes in the economic report that there is an importance to State and local government investment, they do not reflect it in their policy and in their budget—roads, highways, bridges, ports, utility lines are productive kinds of investments that are not to be supported.

The administration has done two things in this regard. It cut taxes, and in order to cut taxes, it cut grants to State and local governments, and by doing that, it cut their potential to finance capital investments. So the administration has simply effected a kind of substitution of private for public investment, and for overall increase in capital formation may not result. Second is this business of a New Federalism, which is not easily understood. What it seems to say is that the stimulation of private sector investment is a Federal responsibility, but that State and local governments really are on their own in terms of investment in roads, bridges, highways, ports, utility lines, and so on.

The administration policy could be right, that is, it could not harm the growth in State and local government investment, if only the following things happen: if State and local governments accept Federal aid cuts for social services and pass it on in the form of social service reductions; if State and local governments see Federal tax reductions as increased taxable capacity and if they raise taxes; if capital expenditures had the highest priority in their budget needs; and if in the long run, those capital investments resulted in increased revenues to the State and local governments. I think the weight of the evidence suggests that none of these things are in fact true, and as a result, the administration's program probably will dampen State and local government investment.

FISCAL CONDITION OF STATE AND LOCAL GOVERNMENTS

To substantiate this position, one should first ask the question about the current fiscal condition of State and local governments. The evidence seems clear—it is not good, and it is getting worse. If you read the National Income and Product Accounts [NIPA] general account deficit for State and local governments, we see that the State and local sector has been in deficit since late 1981. For all the problems with that measure, it does tell us that, over time, their financial condition has weakened. The gains that they made between 1975 and 1980 are gradually being given away. To be sure, their fiscal problems are uneven but the situation is not a strong one. There is other evidence. The Joint Economic Committee's survey of 48 cities says that large cities are cutting services, increasing taxes, and deferring capital spending. The National Conference of State Legislatures finds 29 States very close to the edge in terms of deficits or thin surpluses; 24 actually cut employment last year; the Tax Foundation this year finds that 30 States are increasing taxes—all the signs of a troubled fiscal condition for State and local governments are there.

STATE AND LOCAL GOVERNMENT FISCAL PRIORITIES

What are the priorities of State and local governments, and where do capital expenditures stand? The recession has created heavy unemployment rates, especially high in cities and especially for inner city blacks. The needs of the poor have to stand very high on the priority list of State and local governments, especially those that are the hardest pressed. If you couple that with the fact that the low-income portion of society may well be the target of a lot of Federal policy these days—Federal aid cuts for the social services, reductions in food stamp distributions, social security benefit reform, suggestions of the taxation of unemployment benefits, and so on—a number of issues have to be raised about the protection of the poor. The safety net seems to lie at least partly with State and local government budgets.

Deferred public employee compensation raises another priority issue. The inflation rate is down, and the pressure may be off right now for increased compensation of State and local government employees, but it has been 5 years since the average wage and salary of State and local government employees has increased as fast as the rate of inflation. That is the sort of deferral that cannot be put off much longer, and it is going to come back to haunt State and local governments soon.

Tax increases are taking place, but there is an enormous amount of tax competition among States. In particular, the oldest, hardest pressed States are the most sensitive to tax increases. There is a great deal of pressure not to increase taxes.

Given those kinds of problems and given a slow growth in the national economy, where do new capital projects stand in the priority? The answer is that they stand pretty low. You cannot look just at the rhetoric which says we have great infrastructure needs, but you have to look at the actions. The numbers say that State and local governments may talk about investing in their capital stock, when in fact, they are not doing it; they are actually reducing real investment, and they are reducing investment in capital facilities faster than they are reducing anything else.

INFRASTRUCTURE POLICY

On policy, I would just say three things. First, the solution everyone talks about is borrowing. We hear it at the State level, and we hear it in terms of Federal policy. But borrowing is simply a promise to repay in the future, and if there is no repayment potential, then there is no potential for borrowing. If the tax base is not there, then the borrowing base is not there. States that forget this and begin to move down the road with excessively heavy borrowing are going to have to pay the piper somewhere later on. How can one increase this capacity to borrow? Well, they could increase tax rates much faster than they have been; that is not going to happen. There could be a dramatic recovery in the economy. We may have some recovery in the economy, but we have learned that it is not going to benefit all States equally, and the New Yorks and the New Jerseys, where the needs may be very great, are not going to share as much in that recovery as the average State. We could have rapid increases in Federal grants, and that does not look to be in the cards.

The second point to whether there could be a worse time to stimulate investment in the infrastructure. There is no money; the tax base is not growing; the prospects are not there for growth, and there are so many other priorities that may stand in front of capital investment in the minds of the people who make the decisions. Right or wrong in the long run, I think that is a fact.

Third, if we wanted to reorient the priorities, the Federal Government would have to be saying that they have a better feel than State and local governments as to how the marginal public dollar ought to be spent. But if they believed that, I suppose we would be thinking in terms of new programs of categorical grants, and I suppose we would think about subsidized loan programs of the kind that would cause State and local governments to say the needs of the poor really are not important as the needs of the streets, and so on.

Finally, there is the homework issue. Have we really done our homework; do we really know how to formulate an infrastructure policy? Do we know which State and local governments have good 5-year capital budgets? Have we seen that they have financing plans? Have they established priorities on the basis of careful thought? Have they projected their repayment potential for increased borrowing? Don't we know that there is not even an inventory of capital needs State by State? How many States do we know have an actual inventory of needs? I think a JEC survey is about to try to address some of these questions. If we do not even know what the needs are, is it the time to really sit down and talk about new policy? What kinds of Federal and State subsidies work in terms of stimulating capital investment? I submit that we probably do not know a lot about this subject, including what is the proper Federal role? Finally, by inducing State and local governments to invest more in capital formation, are we introducing a new kind of competition among States for jobs that we might not be well-advised to introduce?

Thank you.

Chairman DOMENICI. Thank you. In spite of some homework on my part, you leave me very confused.

IMPLICATIONS OF THE REAGAN BUDGET FOR STATE AND LOCAL GOVERNMENT INFRASTRUCTURE INVESTMENT

Roy Bahl*

There is every indication that the Reagan budget will slow the development and rehabilitation of infrastructure by state and local governments, and will hinder long-term industrial redevelopment. This was true of the last Reagan budget and will likely also be true of the next one. Moreover, it must be said that these harmful effects on public capital formation will not be even across the country--the distressed areas of the northeast and midwest will be least able to afford to invest in improving their capital stock.

It is not difficult to come to this conclusion. The first point to note is that the public infrastructure is not unimportant in influencing the reindustrialization of the U.S. economy. Aren't water and sewer lines, ports, and roads as important as the construction of plants in increasing the productivity of the U.S. labor force? Second, the current financial condition of state and local governments is growing weaker, in part because these governments have deferred many of their expenditure obligations. It follows that state and local government expenditures will grow slowly, and that the renewal of the capital stock may have a lower priority than the claims of transfer payment recipients, the wages and salary claims of public employees, and the demands for tax reduction.

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*Professor of Economics and Public Administration, and Director, Metropolitan Studies Program, The Maxwell School, Syracuse University.

The Administration's Program and Public Infrastructure

The Reagan program to renew the U.S. economy had some appealing features, especially during the campaign. The use of tax policy to stimulate private sector investment was long overdue, and an appropriate response to the productivity lag in U.S. manufacturing. But needed increases in private sector capital formation is only part of the story. There is also a well-documented set of problems concerning inadequate public sector investment in the infrastructure.[1] For examples, roads, streets, highways and bridges are in a state of disrepair, water and sewers lines are in need of replacement, and major investments need to be made in rehabilitating Port facilities. As may be seen in Table 1, real capital formation in state and local government sector has not increased in recent years, and has dropped noticeably in the last year.

The Administration's programs call for lower taxes to stimulate private investment, and for reductions in Federal aid and social service spending to reduce the budget deficit. To the extent the fiscal condition of some state and local governments is pressed and to the extent capital investments are a low priority for these governments, the Administration is affecting a substitution of private for public capital formation. Moreover, there is the real possibility of outright reductions in human capital and investment as Federal health and education programs are cut back and if state and local governments do not have the resources to pick up the shortfall.

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[1] George Peterson, "Capital Spending and Capital Obsolescence: The Outlook for Cities" in The Fiscal Outlook for Cities, ed. by Roy Bahl (Syracuse: Syracuse University Press, 1978).

Fiscal Condition of State and Local Governments

The overall fiscal condition of the state and local government sector has continued to deteriorate throughout the current recession. The general surplus of state and local governments has been in deficit since late 1981, because of a slow growth in Federal Aid and in own source revenues.[1] One way to think of business cycle effects on state and local governments is to compare the build-up of resources during expansions with the drawndown of these resources during contractions. In other words, one might pose the question... "by how much do state and local governments recover their recession-created deficits and accumulate a surplus during the ensuing expansion. A larger net accumulation implies that the state and local government sector financial position is helped more by the recovery than it is hurt by the recession. This would appear to have been the case during the 1973-1980 business cycle. That is, state and local governments added $20 billion more to their surplus during 19 quarters of expansion than they drew down during 6 quarters of recession.

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[1] The general account surplus is the excess of current and capital expenditures over revenues (net of borrowing) and excludes social insurance funds. A deficit might be viewed as indicating that net borrowing must be undertaken to cover any planned capital expenditures, build up of reserves, expansion, or tax reduction. The problems with using these data are discussed in my forthcoming book State and Local Government Finance and the Changing National Economy.

During the relatively short 1980-1981 cycle, $1.6 billion in general surplus was accumulated; but more than this amount has been lost in the current recession. The longer the current recessicn lasts, the more the state and local government sector will give back the 'gains' it made during 1975-1980, i.e., the tax reductions, the program expansions, and the net debt reduction.

There is other evidence that the current financial condition of at least some state and local governments is failing. A Joint Economic Committee mail questionnaire to 48 large cities revealed a pattern of service level cuts, capital project deferrals and tax increases in FY 1982.[1] Tax rate increases were reported by 20 and user charge increases by 31 of the 48 cities in the survey. An ACIR survey underlines this finding on the increased use of user charges--215 of 307 responding cities reported increases.[2] The National Conference of State Legislatures' fiscal survey at the end of 1981 showed 29 states with prospects for FY deficits or thin budget margins, and 24 states with prospects for FY deficits or thin budget margins, and 24 states reported employment reductions in the preceding year.[3] None of these surveys provided enough information to estimate the severity of cutbacks or tax increases in response to the 1981-82 recession. The Tax Foundation in its very useful annual compendium of state tax actions, reports that tax actions in 30 states in fiscal 1981 will raise revenues by a net $2.5 billion per year.[1] While this is the highest annual statutory increase in 10 years, it represents only about 1.5 percent of total state government tax revenues.

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[1] U.S. Congress, Joint Economic Committee, Emergency Interim Survey: Fiscal Condition of 48 Large Cities, 97th Congress, 1st Session (Washington, D.C.: Government Printing Office, January 14, 1982).

[2] Preliminary results reported in Municipal Finance Officers Association, Resources in Review (Washington, D.C.: MFOA, 1982), p. 11.

[3] Stephen Gold and Karen Benker, State Fiscal Conditions as State Entered 1982 (Denver: National Conference of State Legislatures, 1982).

It may be asked whether there have been substantial variations in fiscal effects of recession across regions or across levels of government. The answer is that there clearly have been, with metropolitan central cities in particular and governments in the declining regions in general, feeling the most pressure. The recession hit the older central cities hardest--they went in earlier and deeper and have come out slower than the rest of the country. If there is a general conclusion to be drawn from these studies, it would seem to be that there are great variations in the magnitude of budgetary adjustments resulting from recession. Though in aggregate the adjustments do not appear to have been all that great, for some governments they may have been substantial. It does seem clear, however, that there is a pattern to fiscal adjustment during periods of recession. State and local governments tend to slow down on spending increases and increase tax rates, but the latter is undertaken later, after other available funding opportunities are exhausted.

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[1] Tax Foundation, Tax Review, Vol. XLII, No. 8 (September 1981).

State and Local Government Fiscal Priorities

The fiscal position of some cities and states has become tighter. Especially older central cities and industrialized states are facing high unemployment rates, slow revenue growth, and cutbacks in Federal social service assistance on which they have become dependent. The revenue shortfall which has arisen raises the question of whether infrastructure renewal and maintenance are high on the state and local government expenditure priority list, or whether continued deferrals are in store. The view here is that continued capital expenditure deferrals are most likely scenario.

One could make an argument that state and local governments have other budgetary claims which may stand ahead of infrastructure renewal. First, there are the needs of the poor and disadvantaged. The unemployment rate is high everywhere, highest in the older central cities, and highest of all for Blacks in cities. A high priority for most central cities will be to pick up some of the growing number of Federal program cutbacks.

Second, there have been deferrals in public employee compensation. The average wage and salary compensation increases of state and local government employees has remained below the growth in consumer prices for four years, and remained below the growth rate in the compensation of private sector employees for even longer (Table 2). It may be very difficult to continue this deferral, i.e., to resist the demands for a catch-up.

Third, there is still pressure to keep tax rates from rising too high, to keep debt burdens from rising too rapidly, and to maintain enough reserves to preserve a good credit standing. Oddly enough, the state or local government who borrows to repair his infrastructure may turn out to compromise his creditworthiness more than one who does not.

Where this discussion leads is to the hypothesis that the Reagan Budget will exacerbate the infrastructure problem, and that reductions in any Federal grant program will partially show up in lower levels of state and local government capital investment.

TABLE 1

CAPITAL INVESTMENT TRENDS
(billions of dollars)

Item	1973	1977	1978	1979	1980	1981
State and Local Sector						
Gross Capital Investment (current dollars)	24.7	39.0	46.4	50.4	56.6	54.9
Gross Capital Investment (1972 dollars)	27.6	26.0	27.7	26.5	26.7	24.6
Gross Capital Investment as Percent of State-Local Spending	15.3%	14.5%	15.6%	15.7%	15.8%	14.3%

SOURCE: Sectoral investment, 1960-73: Paul Schneiderman, "State and Local Government Gross Fixed Capital Formation: 1958-73," Survey of Current Business (October 1975); 1973-1981: Survey of Current Business, July 1982 (July 1976).

TABLE 2

AVERAGE ANNUAL WAGES AND SALARIES PER FULL TIME EQUIVALENT EMPLOYEE BY INDUSTRY, 1962-1979[1]

Year	All Industry	Private Industry	Federal Civilian	State and Local Government
1962	$ 5,162	$ 5,203	$ 6,644	$ 5,017
1972	8,760	8,588	12,679	8,916
1973	9,290	9,104	13,497	9,503
1974	9,991	9,830	14,112	10,063
1975	10,835	10,673	15,194	10,865
1976	11,608	11,451	16,269	11,639
1977	12,403	12,256	17,501	12,397
1978	13,302	13,184	18,946	13,065
1979	14,399	14,334	19,936	13,923
1980	15,790	15,748	21,247	15,172
1981	17,221	17,173	23,049	16,485
	Average Annual Growth Rates			
1962-72	5.4%	5.1%	6.7%	5.9%
1972-73	6.1	6.0	6.5	6.6
1973-74	7.5	8.0	4.6	5.9
1974-75	8.4	8.6	7.7	7.8
1975-76	7.1	7.3	7.1	7.1
1976-77	6.8	7.0	7.6	6.5
1977-78	7.2	7.6	8.2	5.4
1978-79	8.2	8.7	5.2	6.6
1979-80	9.7	9.9	6.6	9.0
1980-81	9.1	9.0	8.5	8.6
	Average Growth Per One Percent Increase in CPI			
1962-72	1.6%	1.5%	2.0%	1.8%
1972-73	.98	.97	1.05	1.06
1973-74	.68	.73	.42	.54
1974-75	.92	.95	.85	.86
1975-76	1.22	1.26	1.23	1.22
1976-77	1.08	1.11	1.21	1.03
1977-78	.93	.99	1.06	.70
1978-79	.71	.76	.45	.57
1979-80	.72	.73	.49	.67
1980-81	.89	.88	.83	.84

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[1] Calendar years.

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, The National Income and Product Accounts of the United States, 1929-74, Tables 6.6 and 6.9; Survey of Current Business (July 1982), Tables 6.5B, 6.6B and 6.8B.

Chairman **Domenici**. Our last witness is Arch Roberts, chairman of the Public Securities Association of New York, and director of Arch W. Roberts Associates, Gainesville, Fla.

We welcome you, Mr. Roberts.

STATEMENT OF ARCH W. ROBERTS, CHAIRMAN, PUBLIC SECURITIES ASSOCIATION, NEW YORK, N.Y., AND DIRECTOR, ARCH W. ROBERTS ASSOCIATES, GAINESVILLE, FLA.

Mr. **Roberts**. Thank you, Mr. Chairman.

I am chairman of PSA, the Public Securities Association, which is the national association of brokers, dealers, and dealer banks that handle most of the U.S. Government obligation trading, the Federal agency securities markets, and the mortgage-backed securities markets. Most importantly so far as today's discussion is concerned, our members, numbering about 300 firms with offices in all 50 States, participate traditionally in about 95 percent of all municipal borrowings. Municipal securities, of course, is a catchall term, and perhaps a misnomer, since it includes all borrowings at both the State and local government level.

In addition, our members account for the vast majority of secondary market trading in municipal securities.

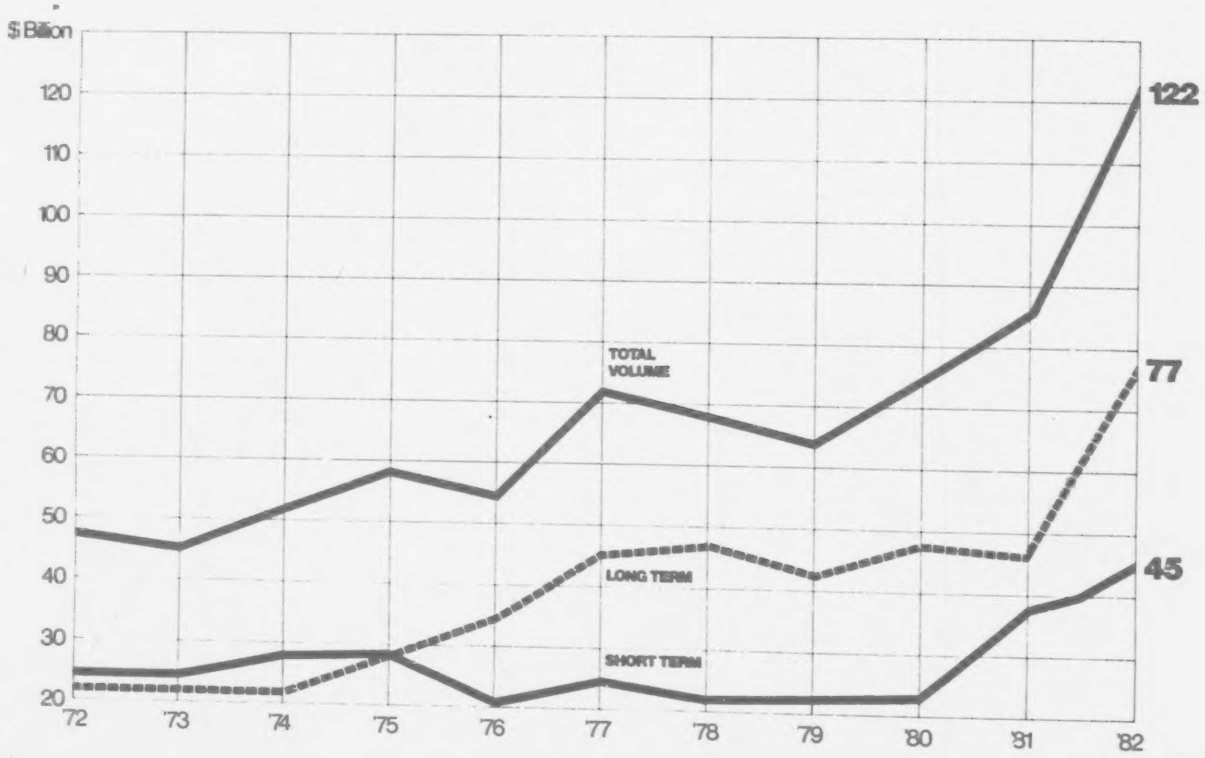
John Petersen [MFOA] has already spoken in terms of statistical data. I have some additional statistics in a bit different form and, if you will bear with me a minute, I will prepare for a little chalk talk.

Chairman **Domenici**. Go ahead.

STATE AND LOCAL BORROWING, 1972-82

Mr. **Roberts**. As you can see, the first chart shows the State and local borrowing volume from 1972 to 1982, in billions of dollars, in absolute dollars, unadjusted for any inflation factor. For those in the audience, you may follow along with some of these figures in the appendix to the written statement that I have submitted.[1]

State and Local Borrowing Volume 1972-1982 (in billions)



Mr. ROBERTS. You will note that 40-odd billion dollars in total State and local borrowing was done in 1972, and that figure over the 10-year period has risen to the total of $122 billion in 1982. More importantly, the long-term volume, which is really the more important statistic since the short-term debt ultimately usually becomes long-term debt, rose from about $22 billion in 1972 to $77 billion in 1982. That increase in absolutely terms is about 137 percent. Of course, you have to apply some sort of deflator to that figure because of inflation. The most appropriate deflator, we think, is the State and local government construction spending deflator, which changes that 237½ percent to about 45 percent. That is still a pretty impressive figure, in terms of what our market has been able to generate for State and local governments for capital needs, in the face of what I think everyone would agree to be some very adverse conditions.

Chairman DOMENICI. That is more like real growth, you are saying, the 45?

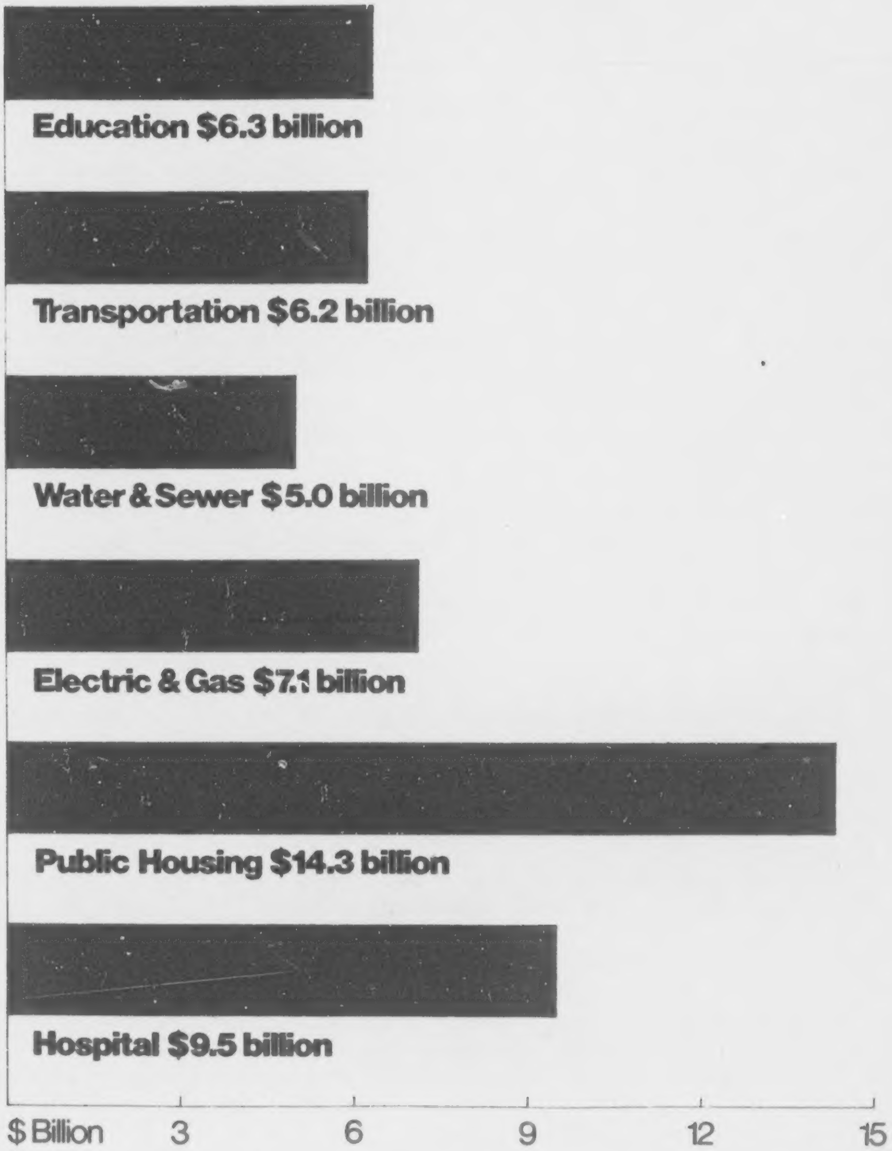
Mr. ROBERTS. That is correct, the 45 percent is almost half again as much over the 10-year period.

MAJOR USES OF PROCEEDS FROM LONG-TERM MUNICIPAL SECURITIES

Chairman DOMENICI. Do you know whether State and local borrowing volume—how is it related to total capital infrastructure projects? Is that half of them in the Nation, a third?

Mr. ROBERTS. I think I can address that in a later chart—and, perhaps, in this chart too, as a matter of fact. The major uses of the proceeds from new long-term issues of municipal securities in 1982 were these: education used about $6.3 billion—that is education in primary, secondary, and graduate levels; transportation used $6.2 billion; water and sewer used $5 billion; electric and gas utilities used a little over $7 million; public housing, $14.3 billion; hospital and other health care needs, including nursing homes and related health care facilities, $9.5 billion.

Major Uses of Proceeds from New Long-term Issues of Municipal Securities–1982



HOUSING CAPITAL

Mr. ROBERTS. Now, the point that I would like to make with this chart is that our market has been responsive to the changing needs, which are always shifting at the State and local levels, for capital; 6 or 8 years ago, perhaps, the housing bar on this chart would not have even been on the chart. We are talking about housing capital provided by State and local governments.

Senator CHILES. It was not even then—how many years, 6 or 8 years ago?

Mr. ROBERTS. Yes. I think this demonstrates that our market has been remarkably flexible, resilient, and responsive to the changing needs of State and local governments. I think everyone will agree that housing has become a pretty crucial need over the past few years, and I think the municipal market did more than its share to provide for the needs that were developed.

This chart demonstrates——

Senator CHILES. Well, now, where you have "Public Housing Borrowing," does that include those funds which States were setting up for their own little sort of FHA's?

Mr. ROBERTS. It includes State housing funds and local——

Senator CHILES. So it is not just "public housing" as we call it.

Mr. ROBERTS. No. That is a misnomer. I am talking about primarily single-family mortgages.

Senator CHILES. All right. That is where the States were pushing all that money out because they thought tbe Federal Government was going to change the law and prohibit part of that.

Mr. ROBERTS. Well, that was partly a cause of the larger volume.

Senator CHILES. Bond dealers were encouraging States to do that, as I recall.

REPEAL PROVISION SUNSETTING MORTGAGE TAX-EXEMPT REVENUE BONDS

Mr. ROBERTS. There is a provision sunsetting mortgage tax-exempt revenue bonds at the end of this year.

Senator CHILES. Yes.

Mr. ROBERTS. I think we will find during this year, as rates have come down on conventional mortgage markets, you are going to see much less borrowing for housing needs at the State and local government level. But we argue for, and PSA supports, repeal of that sunset provision because while this year we might not need it to help provide the housing needs, who knows when in the future it might be needed again? I do not think it is going to be abused. The numbers just do not work in terms of paying off the bonds as conventional rates decline. They cannot push it out if they borrow it, and the investors are not going to buy the bonds if they do not have a clear-cut demonstration that the payments from which we will service those bonds are going to be able to do that.

Chairman DOMENICI. I do not want to argue with you, and I really am not, but on that point, I think the issue is not whether there is a need there; the issue is whether or not, when you look at the overall bond market with its original purpose being to help the local units of government build the infrastructure that they need, how much is that being watered down by diverse uses such as this.

I am not saying one is better than the other, but I think that is what Treasury is addressing, and that is what the Finance Committee is addressing. I mean, we soon will have such a huge part of the entire loan portfolio this kind of tax-exempt, that it loses its effectiveness. It is already happening. Obviously, bonds for the typical, municipal-type uses——

Mr. ROBERTS. The more traditional uses.

Chairman DOMENICI [continuing]. Are going up and up in rates because we have increased the pool.

Mr. ROBERTS. Let me take us back just a little, Mr. Chairman.

Chairman DOMENICI. Of course.

Mr. ROBERTS. We have found that the market for housing and health care bonds—well, specifically, housing bonds—is a market more or less unto itself. While they are rated "A" and "AA" for the most part, they trade at rates higher than the bonds issued for more traditional purposes. That market moves up and down pretty much independently of the market for infrastructure kinds of capital borrowing.

The $14 billion of housing bonds issued in 1982 does not do a whole lot for the infrastructure. I will agree with that.

ENORMOUS GROWTH IN INDUSTRIAL DEVELOPMENT BONDS

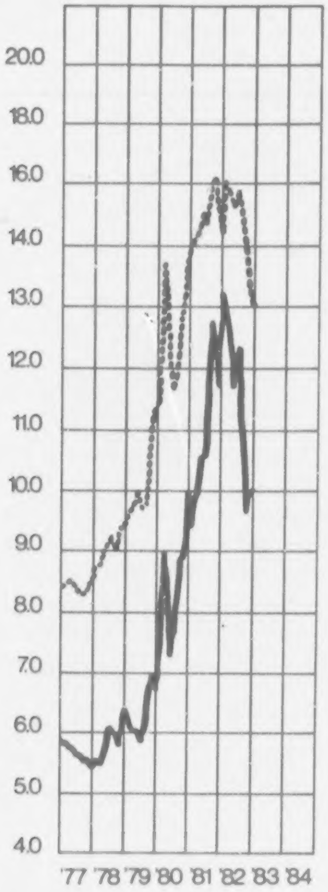
Chairman DOMENICI. Well, you are right. The competition may be more with the enormous growth in industrial revenue bonds versus traditional uses for municipal purposes than with those. They may have their own market. But nonetheless, in that whole exempt area, there is a great and growing portion of portfolios going there, and consequently, the rates are going up.

Mr. ROBERTS. Well, I agree that there is a pretty big volume of industrial development bond issuance, but Congress itself recognized in 1968 that a lot of these so-called private purpose bonds really were public purpose bonds—things such as ports and airports, private water and gas systems, and other exempt facilities—which are all lumped under the heading of "industrial development bonds." Huge amounts of port and airport improvements have been made with so-called industrial development bonds, and they should not, we believe, be lumped together with the small issue industrial development bonds that have a greater direct benefit to private interests.

RELATIONSHIP BETWEEN TAX-EXEMPT AND TAXABLE RATES

The second chart demonstrates the more or less rough relationship between tax-exempt rates and taxable rates. They pretty much parallel each other, but there are a couple of aberrations on this chart that I would like to use to demonstrate my next point. As Dr. Petersen pointed out earlier, in 1982, particularly toward the end of 1982, there was a huge rush to the market by State and local governments with debt issues, for the two reasons that he mentioned. First, there was very receptive bank demand for those municipal issues, particularly in short-term bonds, because bonds that purchased after the first of the year no longer enjoyed deductibility of carrying costs which was reduced by 15 percent. They were "loading the boat" during that period. Second, they feared market disruptions would result from the bond registration requirement that was to have taken effect January 1, 1983. We think they justifiable feared that that requirement would cost them a lot, not only in terms of administration but in terms of rates, since traditionally, their bonds have been more liquid and easier to trade. They paid a rate penalty if they waited. And we find that during that period, because of that feature of TEFRA, 25 percent of the Federal volume for the year was pushed out in the last 2 months, and that is a lot of bonds.

State and Local vs. Corporates (Monthly Averages)



Municipal (Composite)

Corporates (Composite)

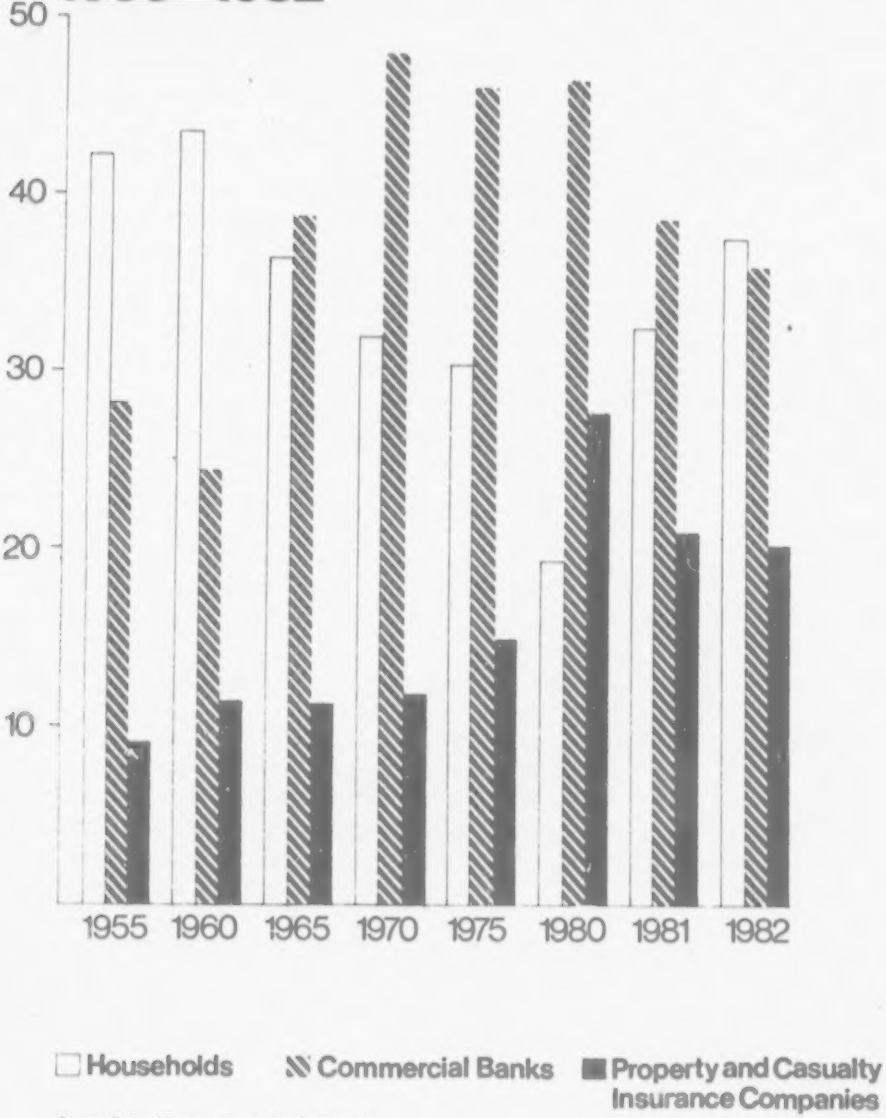
Moody's Investors Service

RESTRICTIONS ON MUNICIPAL BOND ISSUANCE CAUSE CONCERN

Mr. ROBERTS. The other aberration on the chart, you will note, occurs during the last quarter of calendar year 1981. A couple of things happened during that time at the Federal level. There was a great deal of threat and some action concerning certain restrictions on municipal bond issuance. This cast a pall of uncertainty over the whole market, and scared the market, and forced a lot of issuers again to run to go to market quickly. Also, you will recall a piece of legislation creating the small saver's certificate, which began October the 1, 1981. This siphoned some $32 billion away from the traditional tax-exempt markets. Again, that is a lot of money, and the financing needs of State and local governments during that period had to scramble and payed higher rates in the face of all that diverted investment.

As you can see, the major investors in State and local government bonds, based on percentage share of bonds outstanding for selected years, 1955 through 1982, is pretty much all over the lot; it jumps around. The individual investor, who was predominant in 1960, for example, was almost half of the total. The casualty companies were certainly a major factor in 1980. We do not have the years 1977, 1978, and 1979, but they were an even larger factor in those years. Their percentage participation in the market is traceable primarily to the cyclical changes in their underwriting loss picture. In other words, when they are in a cycle, such as they are just appearing to come out of now, they do not need much tax exemption because they are having to pay a lot of claims.

Major Investors in State and Local Government Bonds Percentage Share of Bonds Outstanding for Selected Years 1955–1982



Source: Federal Reserve Flow of Funds Accounts

Mr. ROBERTS. The banks' participation in the market has also jumped all over the place. They were the market in some of these years, and really dictated the rates at which volumes could be issued and how many could be issued.

HOUSEHOLD DEMAND INCREASING

Household demand, if you look at the trend for the past 3 years, and echoing some of Dr. Petersen's remarks, is increasing, according to the chart. The institutional demands, both from casualty companies and commercial banks, is going down for various reasons. Household demand for participation has gone up rather substantially for some pretty good reasons. First, the household investor has always been sort of the residual, or the backstop investor, in municipal paper, and, second, people are in higher tax brackets now, and we have sort of rediscovered the individual investor. The tax-exempt feature of municipal bonds is more attractive to more people, and this is a trend that we have picked up on and have geared more and more of the paper to individual investment. And also, you have seen, as was mentioned in earlier testimony, things which give the individual more comfort, such as the insurance by a couple of major insurance groups which give the bonds AAA ratings. The individual investor is presumably a little less sophisticated than the institutional market, and they enjoy the comfort of insurance.

FANTASTICALLY EFFECTIVE MARKET

I am about to run out of time, so I want to sum up by saying the principal points that I am trying to make are that I am using most of the same numbers that Dr. Petersen used, but I am drawing somewhat different conclusions. I am saying that we have a fantastically effective market. It has worked in the past, it is working now, and I think we can expect it to work in the future and to be flexible regarding the needs of the State and local governments.

It is remarkable. Most people do not realize the magnitude the market and that we have been able to handle all of those demands as effectively as we have. We have got a machine that works, and can be expected to continue to work, and PSA would resist any new devices or tinkering at the Federal level with the traditional workings of the market. We can see that such "tinkering" has affected that market adversely in the past. To use a very tired old cliche, "If it ain't broke, don't fix it."

Chairman DOMENICI. Thank you very much.

STATEMENT OF ARCH W. ROBERTS,* CHAIRMAN OF THE PUBLIC SECURITIES ASSOCIATION, BEFORE THE UNITED STATES SENATE COMMITTEE ON BUDGET

INTRODUCTION

The Public Securities Association (PSA) appreciates the opportunity to testify concerning federal budget policies and their impact on the municipal securities market, as well as regarding alternative public policies that could address public capital investment requirements.

PSA represents brokers, dealers, and dealer banks active in the municipal market, U.S. Government and federal agencies securities market, and the mortgage-backed securities market. We currently have nearly 300 member firms whose offices are located in all 50 states. Last year, our members participated in over 95 percent of the dollar volume of new issues of state and local government securities. These same firms also account for the vast majority of secondary market trading activity in municipal securities. Our membership participates in the full range of dealer activities, including small firms dealing in special assessment issues and local financings, multi-million dollar investment banking powers, full service national wire houses, major money market center and regional dealer banks. Our membership also includes approximately 100 associate members (such as bond counsel, accounting firms, and clearing corporations), whose activities are closely related to the municipal bond market. Therefore, we feel particularly qualified to discuss the ability of the municipal securities market to finance a significant portion of national infrastructure and public works requirements.

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* Arch W. Roberts, who is President of Arch W. Roberts & Co., Gainesville, Florida, is Chairman of the Board of Directors of the Public Securities Association.

Since this statement will analyze issues of significant consequence to the future of the municipal securities market, therefore, it seems appropriate to first focus our attention more generally on this market's fundamental characteristics and on the present state of the market.

BASIC MARKET CHARACTERISTICS

The municipal securities market is one of the largest capital markets in the world. Current estimates indicate that there are $450 billion in state and local government bonds outstanding. Volume of new issues in 1982 was a record setting $122 billion in both long and short-term debt.

For over a century the municipal securities market has provided states and localities access to low cost capital. This market is large and diverse and has several characteristics which set it apart from other fixed income markets.

First and foremost, the interest paid on state and municipal bonds is exempt from Federal income taxes. This Constitutional and heretofore Congressionally-affirmed principle enables local governments to borrow at rates substantially below other taxable fixed income rates, and has provided a benefit to society worth billions of dollars. Their tax-exempt status is the key to investor interest in this security.

Second, the municipal market has provided municipal investors with unparalleled investment safety. The creditworthiness of municipal securities is an important component in their marketability. Their continued financial strength is essential to allow them to provide capital for public works and infrastructure development.

Third, this market is characterized by a staggering variety of individual issues. Estimates vary, but there are approximately 50,000 political entities that have debt outstanding. The vast majority of issuers sell long-term bonds in serial maturities, each one constituting a separate "issue." For this reason, the universe of outstanding municipal issues approaches 1.5 million. This precludes maintaining continuous two-sided markets in many municipal issues, and most of the infrequently-traded credits will find a ready market somewhere in the national network of dealers and dealer banks. There is a very active, sophisticated, and competitive secondary market for most municipal issues.

State and local governments have three principal sources of raising revenue to finance capital projects. These sources of funds are; (1) tax revenues and user fees, (2) transfer payments from other levels of government, and (3) the sale of fixed-income securities. The current trend to lower taxes and resistance to higher user fees at all levels of government, and a changed perception of the role of the Federal Government as a supplier of financial support, have curtailed the first two of these major sources of capital. Consequently, the continued health and efficiency of the municipal bond market is of critical importance to enable states and localities to make necessary improvements to infrastructure and public works.

The decision of a state or local government to borrow funds in the tax-exempt market is based on a wide range of considerations. Issuers consider factors such as the need for the facility being financed, the debt burden a community can sustain, the maturity of and prospects for the local economy, and legal restrictions on borrowing. Under our Federalist system of government, the decision of whether to undertake any such project is left with state or local voters and their public officials. Decentralized decision making permits the financing of projects that are necessary to meet local or regional needs through a financing mechanism that is best suited for that particular issuer.

A predominant means of financing municipal debt is "pay as you use." This concept is based on the premise that new facilities should be paid for over time by those directly benefiting from the project. A community that pays for a new water system immediately, goes the argument, is unfairly taking on a burden that should also be borne by future taxpayers who will get continuing use out of the water system. With this in mind, municipal issues are often structured with repayment schedules that coincide with the minimum expected life of the facility being financed.

There are two fundamental types of tax-exempt securities--general obligation and revenue securities. General obligation securities are generally backed by the full faith and credit of the state or local goverment issuing the bonds. In some instances, the issuer's taxing authority is restricted by state constitution or statute. These bonds are called limited tax bonds.

Revenue bonds are paid off from revenues guaranteed by the particular project being financed. The beneficiaries of the project--the customers or users--pay the debt from revenue, not the community as a whole. Also, generally included in the revenue bond category are special tax bonds secured by a specific source of general revenue, such as sales or other excise taxes.

THE CURRENT MUNICIPAL MARKET

As mentioned earlier, 1982 was a record year for new issues of municipal securities. A total of $122 billion of new securities was issued. New issues of long-term debt exceeded $77 billion and short-term debt amounted to nearly $45 billion (see Table 1).

Market participants continue to be heartened by the recent general decline in borrowing costs for states and localities. However, the decline in interest rates has recently leveled out. The Bond Buyer Index of long-term general obligation bonds on February 11, 1983, was 9.72 percent, down 337 basis points from a year ago (see Table 5).

While precise investment figures are unavailable, it may be helpful to review major uses of tax-exempt debt in 1982. Over $6 billion was raised last year to finance transportation systems, including roads, bridges, ports, and airports. Approximately $5 billion was invested in water and sewer systems. The market provided educational systems with $6.2 billion of capital. Over $14 billion was raised for low and moderate income housing, while $9.5 billion was devoted to health care. More than $7 billion was raised for electric and gas generating facilities.

INVESTOR DEMAND

Since the mid-1950s, three categories of investors have dominated the municipal securities market. Of the $450 billion of municipal debt outstanding at the end of 1982, we estimate that individuals held approximately 37.5 percent, or $169 billion. Commercial banks held $162 billion, or 35.9 percent, and property and casualty insurance companies held $91 billion, or 20.0 percent (see Table 6).

The relative importance of each of the three major investors has shifted over the years. Individuals have only recently become the largest holders of municipals. This development is in large measure a result of inflation induced tax bracket creep and the development of open-end bond funds and unit investment trusts.

Through much of the 1960s, commercial banks absorbed two-thirds of all new municipal issues. In the 1970s they took on less than one-third. The recently amended corporate minimum tax provision is expected to limit their future purchases to an even larger extent.

Traditionally, casualty insurance companies took up much of the slack. However, in the last two years casualty insurers have played a smaller role in the market, primarily because of a cyclical uptrend in underwriting losses which has lessened their need for tax-exempt incomes.

The individual investor has traditionally been regarded as the 'residual' element, or backstop, in the demand equation for municipal securities. Their activity in the market fluctuates widely, with the greatest volume of purchases normally occurring when municipal rates are near their highest levels. In 1969, to take one extreme example, interest rates were at their cyclical peak and individuals accounted for the purchase of almost 97 percent of net new municipal issues. In 1974 and 1975, municipal rates rose to unusually high levels compared to corporate rates (see Table 2) and individuals were again attracted to the market by high interest rates to absorb more municipal bonds than any other single group of investors (see Table 7).

With reduced demand for municipals by commercial banks and property and casualty insurers, individuls were an important element of the municipal market during 1982. At present, individuals (including bond funds), are purchasing approximately 75 percent of the new long-term financing of state and local governments. While direct total holdings of municipal securities by the household sector has increased in recent years, a larger number of individuals have participated in the market through unit investment trusts and open-end funds purchasing municipal securities. At the end of the third quarter of 1982, $418.2 billion in these funds were outstanding.

Commercial bank demand for municipals increased steadily throughout the 1960s, peaking in 1971 with a $12.6 billion net increase in bank holdings of tax-exempt securities, accounting for 72 percent of the market in that year. Generally, bank demand for municipals since 1971 has diminished. Current statistics show that municipal securities are a relatively minor portion of the assets of commercial banks--10 percent in 1982 as opposed to 22 percent in 1971.

One reason for slackened bank demand is that commercial bank profitability has not been strong in recent years. In addition, leasing operations, through which commercial banks make use of investment tax credits, have become increasingly popular as a means of sheltering income from taxes. This practice is likely to expand as a result of accelerated depreciation changes in the 1981 tax laws.

It is further expected that future bank purchases of municipal will decline severely due to the amendment to the corporate minimum tax. The provision was apparently enacted with little Congressional consideration given to its effect on the municipal market (see Table 9).

Property and casualty insurance companies in the past have been important participants in the long-term revenue bond market. The basic motivation for property and casualty company demand for municipals is the same as for commercial banks--after-tax profitability. Their demand for municipal securities is directly related to underwriting profits (or losses). Insurance company profits are cyclical; therefore their purchases of municipal securities follow these cycles.

Property and casualty company participation in the municipal market peaked in 1978-9 (see Table 8). However, property and casualty companies have experienced severe and steadily rising underwriting losses since 1979, and their participation has decreased.

THE EFFECT OF FEDERAL BUDGET POLICIES ON THE MUNICIPAL SECURITIES MARKET

During the past few years, the fixed income securities markets have been forced to contend with record budget deficits and high levels of inflation. As a result, interest rates have risen and fixed income securities have been subject to greater price volatility. In addition, continuous changes in federal tax policy have exacerbated the effect of the above-mentioned conditions on the municipal securities market. Nevertheless, the municipal market has managed to raise record amounts of capital for states and localities in an efficient and cost effective manner.

The costs of high interest rates to state and local governments are substantial. By way of example, each additional one percent will cost state and local governments an additional $500 million annually on a volume of $50 billion in long-term financing. If one assumes an average life of the securities of 15 years, this would be a cost of $7.5 billion.

During the 1970s, the Bond Buyer Index (BBI) averaged 6.95 percent. So far this year, the BBI has averaged 10.81 percent. This differential of 386 basis points means an added interest cost of $2.9 billion per year, or $44.6 billion over the estimated life of the debt, based on current estimates of new long-term financing.

Since 1979, high levels of interest rates have increased borrowing costs for all entities, taxable and tax-exempt alike. The tax-exempt/taxable yield ratio has increased in large measure due to federal tax policies which altered the structure of the market, creating an almost continuous air of uncertainty among its participants. While in 1977 the ratio for long-term securities was approximately 60 percent, by late 1981 and early 1982 the ratio reached record levels of approximately 80 percent (see Tables 2 and 4).

It is imperative that the Federal Government persevere in lowering budget deficits generally, while continuing to keep down the rate of inflation. To this end, the PSA Board of Directors in March 1981 adopted the following resolution:

> Recent inflationary pressures have forced the markets for fixed-income securities to experience historically high interest rates and unacceptable volatility which have increased significantly the borrowing costs of state and local governments and the U.S. Government and its agencies. The health of these markets is vital to the continued efficient operation of government at all levels of our society.
>
> We support federal efforts to implement a comprehensive economic plan that would reduce the rate of inflation and control federal spending. We believe that the major components of any such economic plan would consist of a federal budget which will restore the public's confidence in the

government's ability to control the growth of federal spending; the adoption of a tax policy which would stimulate savings and investment; the elimination of excessive and unnecessary federal regulation; and implementation of a federal program that would reduce the Treasury's use of the public credit markets and establish a disciplined monetary policy. We believe this type of program will serve to improve investor confidence and the efficiency of the public credit markets.

Today we reaffirm that resolution and urge that Congress reduce federal spending further and with it the size of the federal deficit. Such a change in federal fiscal policy would do more to lower state and local government borrowing costs than any other federal action. The municipal securities market has also, of course, been adversely affected by the revenue raising component of the Federal budget.

While Federal tax policy often affects the municipal tax-exempt market, its effect was especially pronounced during the fall of 1982. The Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA) contained two provisions which artificially stimulated new issue activity during the last quarter of 1982. Approximately 25 percent of long-term municipal securities in 1982 was issued during in November and December. The rapid increase in volume is a leading cause for increased municipal interest rates and the concomitant narrowing in the tax-exempt/taxable yeild ratio (see Tables 3 and 4).

TEFRA established a corporate minimum tax which indirectly taxes bank holdings of municipal securities acquired after 1982. As expected, the provision has limited bank purchases of municipals this year. Consequently, its enactment in the Fall of 1982 induced banks to increase their holdings of municipals during the latter part of the year.

An even larger factor affecting the increase in volume during the latter months of 1982 was the requirement that municipal securities issued after 1982 be in registered form. Although the effective date was delayed late in December 1982, the anticipated registration requirement added significantly to the 1982 volume.

In addition, TEFRA contained provisions regarding exempt facility industrial development bonds. These securities play an integral role in financing the Nation's infrastructure needs.

Section 103(b)(4) of the Internal Revenue Code enumerates the types of facilities that may be issued with exempt facility IDBs. Among these facilities are: ports, airports, wharves, mass commuting facilities, facilities for the local furnishing of gas or electricity, water facilities for the general public, and low and moderate income multi-family housing.

Municipal financing of these projects is essential to the construction of public works. The fact that private parties may operate or otherwise benefit from these facilities demonstrates that public objectives can often be served through private participation. Exempt facility IDBs provide an opportunity for the public and private sectors to form a partnership for rebuilding our Nation's infrastructure. The Federal Government should not interfere with the ability of states and localities to determine their own needs and to finance them by issuing these types of securities.

ALTERNATIVE PUBLIC POLICIES THAT ADDRESS PUBLIC CAPITAL INVESTMENT NEEDS

Reports indicate that both Congress and the Administration are currently considering several alternatives intended to meet the Nation's public infrastructure requirements. The various proposals include public works programs, creation of state infrastructure banks, and the taxable bond option. We fear that any form of federal intervention which effectively changes the manner in which state and localities raise funds will have an unsettling effect on this market. Consequently, borrowing costs will increase. At the same time, the federal presence will result in a reduction in the autonomy of states and localities.

We firmly believe that, in spite of record budget deficits and the impact of inflation, the municipal market continues to operate efficiently. In our view, the market itself provides the best discipline as to the amount and types of projects worthy of financing in the public credit markets.

The infrastructure and public works needs of the states are broad and diverse, making it very difficult to address state and local borrowing needs at the federal level. Even more importantly, however, the Federal Government should not exercise power in a way that impairs the states' ability to function effectively in a federalist system. In order to ensure that the balance of this federalist system is maintained, the Federal Government should not be moving in the direction of pre-empting the financial decison-making process of state and local governments. PSA believes, therefore, that for both practical and constitutional reasons, the question of infrastructure and public works development is best resolved at the state and local level.

New financing techniques have been developed to meet the challenges created by high rates of inflation, interest rate volatility, record and growing federal deficits, and inefficient federal regulatory policies. We believe that an unobstructed market, rather than federal subsidies, is the preferable approach for addressing these challenges.

The following examples illustrate methods introduced by market participants to lower the costs of borrowing by states and local governments. The use of private insurance is gaining increased acceptance by issuers. The principle companies currently providing such insurance are the American Municipal Bond Assurance Corporation (AMBAC), a wholly-owned subsidiary of MFIC Investment Corporation, which began operations in 1971, and the Municipal Bond Insurance Association (MBIA), a group of five major insurance companies, which began in 1974. Both insure municipal bond issues as to principal and interest for the life of the bonds. Standard & Poor's rates AMBAC and MBIA insured issues as AAA credits. Insured issues reduce the amount of default risk that bond holders are exposed to, thus resulting in lower interest costs.

A related innovation regards the use of letters of credit. Letters of credit, issued for the most part by money center banks, are often used as an irrevocable pledge to meet debt service payments in the event the issuer or beneficiary is unable to do so. The added security of both these features has resulted in decreased borrowing costs for issuers.

A number of municipal issuers have issued "put-option" bonds. Also known as "option-tender" bonds, they allow an investor to redeem bonds at par value on specified dates many years before stated maturity. This feature is designed to provide investors with a hedge against future interest rate increases and increased liquidity. The market will accept lower rates of interest in exchange for these benefits.

Another technique increasingly employed by issuers is the use of bonds that do not make periodic interest payments. They are most attractive to investors during periods of falling interest rates when investors attempt to "lock in" prevailing rates of interest. Two types of these securities are being issued; "zero coupon bonds," which are issued at substantial discount from their par amount at maturity, and "multiplier bonds," which are issued at par with a stated rate of interest compounded at maturity. Both types of these obligations offer issuers lower borrowing costs.

Variable note securities, keyed to current interest rates, have also been sold by municipal issuers. Interest rates are adjusted periodically, usually in relation to the rates on government bonds. This is designed to provide protection to investors in a rising interest rate environment and reduced interest costs to borrowers if rates decline.

Municipal lease obligations are designed to provide money for various capital investments such as construction equipment, computers, and rolling stock. They generally provide for rapid repayment of principal and interest.

In order to take advantage of low short-term rates of interest, municipal commercial paper is being issued by a growning number of state and local borrowers. Commercial paper, typically issued for a period of 15 to 90 days, trades as much as a full percentage point below one year notes.

It has been reported that certain members of Congress and others are interested in some type of taxable bond option (TBO) proposal. PSA has a longstanding policy position in opposition to the treatment of municipal securities as taxable obligations. We believe that a taxable bond option contravenes basic tenets of federalism and would damage the entire municipal market.

Proponents of a TBO argue that the municipal market provides an inefficient "subsidy" to state and local government borrowers. This view rests on the assumption that the tax exemption is a federal "tax expenditure." The term "tax expenditure" is defined in the Congressional Budget Act of 1974 as "revenue losses" attributable to provisions of the federal tax laws which allow a special exclusion, exemption, or deduction from gross income." We vigorously object to the term "tax expenditure" as it applies to municipal tax-exemption. It certainly is not a tax expenditure for state and local governments.

We do not share the view that the tax exemption for state and local obligations is derived from an exclusion appearing in the federal tax laws. Therefore, the concept of "federal revenue loss," in our opinion, should not be applicable to a discussion of the municipal market.

PSA believes that the basis of the tax exemption for municipal securities lies at the very foundation of our federalist system of government. We believe the tax-exempt status of municipal securities should be preserved to enable state and local governments to continue to perform their responsibilities at the lowest possible cost within this federal system.

In addition, the TBO threatens the autonomy of the market by injecting the Federal Government into state and local government borrowing decisions. This, in turn, would lead to greater federal intervention, and consequently, more federal control over state and local government financial activity. Moreover, we believe that a version of TBO we have heard discussed, by providing a direct federal subsidy to be distributed at the state level, would politicize access to the public credit markets by municipal and other local issuers.

There is little reason to believe that the TBO would improve the marketability of "hard-pressed" state and local governments. The TBO would not improve the credit of a state or local government since the Federal Government would not have an obligation to repay the principal or the nonsubsidized portion of the interest. In addition, a poor credit would remain such whether its obligations were issued in the taxable or tax-exempt market.

CONCLUSION

State and local governments are being asked to finance the much-needed revitalization of our Nation's public works and infrastructure. Financing challenges of this scope are not new to state and local governments. Over the years, states and localities have financed the construction of facilities necessary to the social and economic well being of all Americans. The ability of the tax-exempt municipal securities market to support undertakings of this dimension is testimony to the partnership of progress, which has evolved between states and localities and private enterprise.

Decisions concerning infrastructure development are best made by states and localities. The principles of Federalism and the rigors of the market require that federal actions not jeopardize the flexibility of states and localities in choosing, consistent with determinations of public purpose under state law, the manner in which borrowing occurs and the types of projects they will finance.

PSA believes that state and local governments, through the tax-exempt municipal securities market, can raise the considerable sums of money necessary to aid in our National economic growth. However, we fear that excessive federal interference in this market could render it less useful to states and localities.

APPENDIX

Table 1

State and Local Borrowing, 1972 - 1982
(Dollar Amounts in Billions)

Year	Long-Term	Short-Term	Total	Number of Issues
1982	$77.3	$44.7	$122.0	9340
1981	47.8	37.4	85.3	7861
1980	48.4	27.7	76.1	7933
1979	43.3	21.7	65.0	7453
1978	48.3	21.4	69.7	8066
1977	46.7	24.8	71.5	8333
1976	35.3	20.1	55.4	6932
1975	29.3	29.0	58.3	8107
1974	22.8	29.0	51.8	7701
1973	23.0	24.7	47.7	8147
1972	22.9	25.2	48.1	8420

Source: Public Securities Association
Municipal Securities Data Base

Table 2

Municipal Yields as a Percentage of Corporate Yields

Year	Long-Term*	Short-Term**
1982	78%	53%
1981	73%	47%
1980	65%	43%
1979	61%	46%
1978	63%	46%
1977	65%	47%
1976	70%	49%
1975	74%	53%
1974	68%	50%
1973	66%	N/A
1972	69%	N/A

Source: Moody's Bond Survey. Percentage calculations prepared by Public Securities Association.

* Moody's yearly averages of yields on Aa municipal to Aa corporate bonds.

**Yearly averages of yields on tax-exempt 90-day project notes to 90-day commercial paper yields.

Table 3

New Issues of Municipal Securities by Month - 1982
(Amounts in billions)

Month	Long-Term	Short-Term	Total
January	3.9	2.6	6.5
February	3.7	2.8	6.5
March	5.7	3.1	8.8
April	6.7	3.2	9.9
May	5.7	6.1	11.8
June	5.8	4.9	10.7
July	5.6	3.4	9.0
August	6.5	4.8	11.3
September	6.5	3.2	9.7
October	8.3	3.4	11.7
November	9.8	4.1	13.9
December	9.1	3.1	12.2
Jan.-Dec. 1982	77.3	44.7	122.0
Jan.-Dec. 1981	47.8	37.4	85.3
Dollar Change	29.5	7.3	36.7
Percent Change	61.7	19.4	43.1

Source: Public Securities Association
Municipal Securities Data Base

Table 4
Tax Exempt/Taxable Yield Ratio

	Short Term	Long			
		Aaa	Aa	A	Baa
1979 Annual Average	44.4	61.3	61.6	62.5	62.7
1980 January	38.5	59.3	58.1	59.3	61.2
February	39.3	58.8	59.0	60.4	59.8
March	39.4	63.0	62.0	64.8	71.3
April	42.3	66.0	62.3	62.0	64.8
May	55.8	61.9	58.2	60.1	60.9
June	42.9	67.2	64.2	64.3	62.8
July	42.2	66.4	66.3	66.9	66.9
August	42.0	69.0	69.1	69.5	70.3
September	47.7	68.9	69.2	69.5	68.2
October	39.4	68.1	67.9	69.7	66.1
November	40.0	67.2	66.7	68.5	66.5
December	39.2	71.5	69.9	69.9	70.3
1980 Annual Average	42.4	65.6	64.4	65.4	65.8
1981 January	40.2	70.1	68.0	68.7	65.9
February	38.9	70.9	70.1	69.2	66.0
March	43.4	71.3	70.5	69.7	67.8
April	44.3	70.5	70.8	71.1	69.7
May	40.0	69.0	69.5	70.2	70.5
June	43.0	71.7	71.5	71.4	70.9
July	44.9	71.0	71.9	71.9	71.4
August	46.2	74.5	77.7	78.6	78.2
September	59.4	74.6	79.0	81.0	80.4
October	59.9	78.2	79.0	78.0	78.0
November	53.7	77.2	74.9	76.2	77.4
December	54.9	82.2	74.4	80.0	80.4
1981 Annual Average	47.4	73.4	73.1	73.8	73.1
1982 January	52.6	81.0	81.5	83.3	81.6
February	49.9	79.9	80.7	80.7	80.5
March	54.3	81.9	80.3	83.1	81.5
April	53.7	80.6	81.1	79.9	79.2
May	54.6	77.5	77.2	76.6	75.4
June	55.0	78.0	78.3	77.0	75.3
July	56.2	78.5	79.9	78.0	78.4
August	55.7	77.9	75.3	72.4	75.7
September	46.8	74.9	75.4	70.5	76.0
October	48.1	75.5	73.3	68.9	72.4
November	48.8	80.9	77.8	73.5	75.5
December	56.2	78.9	79.2	74.9	76.4
1982 Annual Average	52.7	78.8	78.3	76.6	77.3

SOURCES: Short Term: Federal Reserve Bulletin, Bank of America Quote Sheet, Weekly Money Market Summary of Continental Illinois National Bank and Trust Company

Long Term: Moody's Bond Survey

Table 5

The Bond Buyer Indices February 1982 - February 1983
Average Municipal Bond Yields

DATE	TWENTY GENERAL OBLIGATION BONDS	TWENTY-FIVE REVENUE BONDS
1983		
Feb. 10	9.72	10.23
Feb. 3	9.74	10.30
Jan. 27	9.66	10.33
Jan. 20	9.48	10.15
Jan. 13	9.37	10.10
Jan. 6	9.48	10.37
1982		
Dec. 30	9.56	10.54
Dec. 22	9.84	10.66
Dec. 16	10.05	10.81
Dec. 9	10.13	10.79
Dec. 2	10.23	10.92
Nov. 24	10.16	10.85
Nov. 18	10.20	10.79
Nov. 10	9.92	10.67
Nov. 4	9.96	10.66
Oct. 28	10.05	10.82
Oct. 21	9.69	10.47
Oct. 14	9.25	9.78
Oct. 7	9.75	10.31
Sept. 30	10.48	10.98
Sept. 23	10.58	11.10
Sept. 16	10.74	11.47
Sept. 9	10.75	11.64
Sept. 2	10.74	11.97
Aug. 26	10.38	11.85
Aug. 19	10.82	12.28
Aug. 12	11.86	12.84
Aug. 5	11.87	12.90
July 29	11.97	13.05
July 22	12.01	13.12
July 15	12.36	13.32
July 8	12.47	13.36
July 1	12.58	13.58
June 24	12.62	13.58
June 17	12.63	13.51
June 10	12.40	13.15
June 3	12.13	12.94
May 27	11.99	12.78
May 20	11.96	12.74
May 13	11.82	12.69
May 6	12.04	12.82
April 29	11.97	12.84
April 22	12.29	12.93
April 15	12.54	13.22
April 7	12.99	13.60
April 1	13.13	13.70
Mar. 25	13.04	13.79
Mar. 18	12.99	13.73
Mar. 11	12.71	13.59
Mar. 4	12.53	13.35
Feb. 25	12.70	13.52
Feb. 18	12.96	13.75
Feb. 11	13.09	13.89

Table 6

Major Investors in State and Local Government Bonds

Percentage Share of Bonds Outstanding for Selected Years

1955 - 1982

Year	Percent Held by Households	Percent Held by Commercial Banks	Percent Held by Property and Casualty Insurance Companies
1955	42.2	28.2	9.1
1960	43.5	25.0	11.4
1965	36.3	38.7	11.3
1970	31.9	48.6	11.8
1975	30.4	46.0	14.9
1980	19.3	46.4	27.7
1982	37.5	35.9	20.2

Source: Federal Reserve Flow of Funds Accounts

Table 7

Participation in the Municipal Market by Individuals
(Excludes Mutual Funds)
(Dollar Amounts in Billions)

Year	Net Change in Municipals	Dollars	Household Sector as percent of Net New Municipals	Purchases as Percent of Change In Financial Assets
1982 (3Q)	54.3	34.1	63.0	9.6
1981	35.0	18.5	53.0	5.3
1980	25.0	3.3	13.2	1.2
1979	18.0	2.4*	-	-
1978	28.3	3.3	11.7	1.3
1977	23.7	2.6	11.0	1.1
1976	15.7	2.5	15.9	1.3
1975	16.1	6.2	38.5	3.9
1974	16.5	8.3	50.3	6.3
1973	14.7	5.3	36.1	3.5
1972	14.7	2.3	15.6	1.8
1971	17.4	.1	.6	.01

* Individuals were net sellers of municipal securities.

Source: Federal Reserve Board of Governors, Flow of Funds

Table 8

Property and Casualty Insurance Company

Participation in the Municipal Market
(Dollar Amounts in Billions)

			Changes in Casualty Company Holdings	
Year	Net Change in Municipals	Dollars	As Percent of Net New Municipals	As Percent of Changes in Financial Assets
1982 (3Q)	54.3	2.8	5	17
1981	35.0	1.0	3	6
1980	25.0	8.4	34	41
1979	18.9	12.3	65	61
1978	28.3	13.1	46	67
1977	23.7	10.7	45	53
1976	15.7	5.4	34	36
1975	16.1	2.6	16	36
1974	16.5	2.2	13	47
1973	14.7	3.6	24	56
1972	14.7	4.3	29	54
1971	17.4	3.5	20	53

Source: Board of Governors, Flow of Funds

Table 9

Selected Measures of Commercial Bank Demand
(Dollar Amounts in Billions)

		Changes in Commercial Bank Holdings		
Year	Net Change in Municipals	Dollars	As Percent of Net New Municipals	As Percent of Change in Bank Assets
1982 (3Q)	54.3	-1.7*	-	-
1981	35.0	8.2	23	6
1980	25.0	13.6	54	13
1979	18.9	9.5	50	7
1978	28.3	9.6	34	7
1977	23.7	9.2	39	9
1976	15.7	3.0	19	5
1975	16.1	1.8	11	6
1974	16.5	5.4	33	8
1973	14.7	5.7	39	7
1972	14.7	7.2	49	9
1971	17.4	12.6	72	22

*Commercial Banks were net sellers of municipal securities

Source: Board of Governors of the Federal Reserve System
Flow of Funds Accounts

Chairman **Domenici**. Governor, I understand you have to leave at about 11:30. I am going to yield to Senator Chiles first, and then I have a couple of questions and we will proceed to the other witnesses.

Senator Chiles?

ABILITY TO HANDLE INCREASED TAX AND USER FEES

Senator **Chiles**. Governor, what you are talking about now in your new Infrastructure Bank, are all the New Jersey communities going to be financially able to handle their increased tax and user fees that are going to result from their obligations to repay?

Governor Kean. Well, we hope so. They are certainly going to be more able to handle them than the situation now. Right now, almost all of these communities would have to go into the private market and pay interest, either to complete a project or, in most cases, pay the whole cost of a project. We believe the kind of flexibility we offer with the bank—it does not mean we cannot give longer terms or what-have-you to those who are more hard-pressed—but we believe all communities will be in better shape eventually under a bank concept than they are now.

ABILITY TO RECYCLE THE DOLLARS

Senator **Chiles**. As I recall, one of the reasons for a Federal capital grant program originally was that municipalities did not have the ability to repay, so now, if we are talking about going away from grants and going toward loans, what changes happen that allow them to repay, since we have sort of reduced the grant programs——

Governor **Kean**. Yes, Senator, if we could count on an ongoing grant program of the kind that was available a number of years ago from the Federal Government, we probably would not be making this proposal today. But looking at reality, we just do not believe this kind of largesse, in a sense, from the Federal Government is possible anymore, not only not today, but we do not see it coming up in the future. And so this is really a concept, in a way, of building as much as we can, given the great shortage of Federal funds, in other words, being able to recycle the dollars and use them over and over again, instead of just once.

NO PLANS TO CHANGE PRIORITIES

Senator **Chiles**. You seem to be talking about the need, or the legislation that we are talking about would envision longer commitments on the part of the Federal Government. Now, that is going to reduce our flexibility, is it not, to be able to determine where we think the directions of the resources of the Federal Government should go. Aren't we sort of locking ourselves into some very long-term commitment that is going to reduce our flexibility if we think the needs are somewhere else?

Governor **Kean**. Well, first of all, in terms of dollars, of course, it will reduce the need for Federal participation, but beyond that, as far as the list, taking our wastewater priorities, we are planning to stay with the same list. We are not planning to change the priorities one single bit, so the kind of determinations which are made now on priorities are not going to change, or we do not envision them changing at all, and we will proceed down the list the same as we would proceed down the list to the best of our ability under the current system.

BANK CAN ACHIEVE STABILITY IN FUNDING

Senator **CHILES**. We always sort of say the time that we should be doing a lot of these capital projects is in the time of recession when we need the jobs, and the time we should not be doing them is the time that things are speeding up. It never seems to work that way. I have never seen anybody slow down any building at the time of the speedup, and in fact, there is always someone saying you have got to keep it going. How would the bank try to regulate that, or how would a state through its bank try to do that, and is the Federal Government giving up its ability from here to try to control what that pulse is going to be again?

Governor **KEAN**. Well, obviously, the more Federal funds we had available to us, the greater options we would be able to use through a structure like the bank. We would not have to use—for instance, to answer your question, we would not have to use the bank for all funds. The legislation we are asking for would give the State the option of using the bank. But we believe that through the bank, we can achieve stability in funding. These projects are ongoing. The kind of uncertainty of funding that has been present for us in this State and, I expect, for every State, from both the Federal and the State level, has meant that communities have not known when to start projects, whether or not they can complete them, whether if they started them now, whether the State funding would be available 3 or 4 years from now when they needed it. So, what we are talking about really is trying to stabilize the whole idea of funding so the local communities who want to proceed on a project would be able to do it on a rational basis. Obviously, if the Federal Government at some point or other figured for economic reasons they wanted to put more money into the capital process, we would be very grateful to receive it.

REACTION OF CITIES TO INFRASTRUCTURE BANK

Senator **CHILES**. What has been the reaction of your cities to this proposal?

Governor **KEAN**. So far, we have had no major opposition within the State. Our State legislature has accepted it in a bipartisan manner. I am of one party, my legislature is of another, and it is being cosponsored by the leaders of both parties in our State legislature. Our cities, we have not had any adverse reaction. Some of the ones who under the present system could start a project realize under current Federal law that they now have to make an obligation to finish it, and they do not see in many cases that they will be able to finish it without something like the bank in place.

Senator **CHILES**. What other Federal grant programs would you envision should be placed into the participating bank, given additional flexibility?

Governor KEAN. Well, we would like the flexibility in the law to place programs of water supply, obviously, transportation, giving in other words, the States the option for these kinds of moneys that are supplied by the Federal Government to be used in a bank concept if the State so desired.

REVOLVING FUND VERSUS GRANT

Chairman DOMENICI. Senator Chiles, the legislation that I introduced yesterday does two things. In terms of a sewer program, it would create an option within the State to use the revolving fund rather than taking the grant. In that respect, I clearly understand and had gone through with them before I introduced it, that they tailored their financing arrangement around that program. I am not positive it will work for many others, but with reference to it, the three ingredients are we grant the money, but the money never pays for a full facility; by definition, somebody has got to come up with a whole bunch; and third, in almost every case, there are user fees involved, so they have built the concept around you are only going to pay for a piece of it, and once you give it to us, it is gone, and our local community has to find the money some way for its big match share, and to pay it, they have user fees. So in that respect, I understand clearly their option, and I am totally convinced it will work.

With reference to the generic legislation of an infrastructure bank, I did not introduce it with any short-term infrastructure accelerated public works notion. Quite to the contrary, I stated in my statement that I perceive that we are going to move in some new directions on infrastructure needs, and that I did not see us continuing categorical grant proliferation where we zeroed in and had more and more, and that maybe the infrastructure bank would create some flexibility for Congress to say, "Here is a piece of money. Now you apply it," under rules and regulations that are flexible, yet directed. "You have to finance a whole batch of it yourselves, and if that happens to fit, we give you the seed money." That is the general notion. It could even be that they end up, out of their bank, financing part of it in the typical way that is being described by Mr. Roberts. I am not smart enough to understand that, but I perceive that that might be the case. What that legislation is saying is take another look at whether or not you could get better leverage by using what you might have heretofore used as a grant. Take a look at whether or not it might be better leveraged if it were put into an infrastructure bank with guidelines—and obviously, there would be detailed hearings on it. But something in this arena is going to change from the last 10 or 15 years, not just because of a shortage of money, but because categorical grant programs—and because they all are not going to fit; I repeat, I do not know whether highways will ever fit, because a revolving fund concept is required, and you have to be generating some money, and then you apply it to a typical financing arrangement. So it is in that context that the idea was exciting to me.

Governor KEAN. We figure in a State that highways could only fit through dedicated revenues; no other way.

Chairman DOMENICI. Otherwise, it will not.

Governor KEAN. Yes.

ABILITY OF DEPRESSED AREAS TO PAY LOANS

Senator **Chiles**. How do you envision—you are saying, and I like the idea that you are going to have safeguards, that there have to be user fees included? What are you going to do about a depressed area of a State—Appalachia or something, that just is not going to be able to generate user fees?

Mr. **Bedeman**. Well, I think, Senator, that gets to another question you raised earlier about the ability of governments that may be strained. We face that situation right now, in terms of allocation of funds. I think that loans, whether they come from the equity fund or whether it comes through bond financing, are going to have to be tailored to meet facts and circumstances, just as they are now. We are really talking about underwriting with regard to the bank, in terms of how they are going to make an arrangement for a community. Our own appropriations process, for example, in a weak community, can subsidize such loans. From a bank standpoint, as long as, like any bank, its equity is not destroyed in the lending process, that is what is crucial. If you have a community that has a weak ability to pay, or you have a community where we already are bumping against State-imposed controls on borrowing, one way you can deal with that, as we do now, is through special underwriting processes through our own appropriations process, or through moneys available out of Washington, to subsidize those communities to get the job done. Again, the key is that the bank continues to have its equity recycled. What the bank cannot do is give away its equity, because then, like any bank, it ceases to exist. But there are processes for dealing with that that exist now.

Chairman **Domenici**. Senator, let me suggest, just on a general basis, what I know about it and how I would answer the question. Using just one Federal program, the second-largest public works program we have undertaken is the sewer program in the country, second only to the highway program. The same question could be asked, under existing Federal law—forget their infrastructure bank—how would a very depressed city that needs a sewer plant finance it now? It is damned difficult. They have to charge something for sewer, because there is no 100 percent financing up here. In fact, the newest legislation goes down as low as 55 percent, to my recollection, so they have to find 45. Many of the items they might want to renovate are not even covered and will not be in 8 or 10 years, because the thrust is to clean up existing problems, and that is the general needs test. They would have a very difficult problem financing it now. I assume in some States, the States must be stepping in and helping the community that finds itself in that posture. They could send an application up with high priority, but where does the 45 percent of the $35 million sewer plant come from? If they are very, very poor, they do not have it, and if they are already taxed to the limit, they do not have it. If they are generating enough users, they may go out and sell some bonds. All of that would still mesh into the formula you are talking about, as I understand it.

Mr. **Bedeman**. That is correct, Senator. To second what you said there, Senator, given the circumstances, there is no question, Senator Chiles, that getting a grant from an individual or community standpoint is better than getting a loan, but we are back to square one again, as to how many grants are there and how many grants are there going to be. We can demonstrate in every one of these 237 communities in New Jersey that if the alternative boils down to the locals doing it themselves versus making use of what we propose, there are going to be lower user costs and lower costs to the Government using the infrastructure bank approach. And at the end of the cycle, in 10 or 15 years, there is capital remaining in this bank, dedicated to go into infrastructure purposes. It is a delivery mechanism that does not exist now.

EMPLOYMENT CREATION IN A RECESSION

Chairman **Domenici**. Dr. Bahl, you painted a scenario that is obviously very gloomy overall, and I think we all know that. Thank you, Governor. We understand you have to leave, and we are most appreciative that you came. I think some of us are very concerned about the conclusion you would reach about infrastructure activities—not this new idea—just basically. If I read you correctly, you are saying the economic condition of local communities is so bad that now is not really the time to get into infrastructure, or into the allocation of resources for infrastructure.

Some of us have the notion that, No. 1, if we are going to spend money with reference to recession curing, that it surely ought to go into capital improvements rather than other types of expenditures that are focused only at job creation. Would you agree with that?

Dr. **Bahl**. Yes—do you mean employment creation in a recession is a proper role of the Government?

Chairman **Domenici**. Yes.

Dr. **Bahl**. I agree with that.

Chairman **Domenici**. We are all thinking that we ought to help them build a road or a needed hospital rather than say to a city, "Here is an extra $8 million; you hire some people." You would agree with that notion, wouldn't you, that we ought to do the former, not the latter?

Dr. **Bahl**. Right.

MORE INFRASTRUCTURE NEEDED TO CARRY GROWTH

Chairman **Domenici**. Second, many are saying that if you are looking for a sustained economic recovery, that much of the infrastructure is in such bad shape that it might indeed cause a negative impact on the economic recovery because you do not have the needed infrastructure to carry the growth. You are in a chicken-and-the-egg posture to some extent. Do you agree that there is any concern with that?

Dr. **Bahl**. Oh, yes, I agree.

Chairman **Domenici**. Well, it seems to me if you agree with that, that one must conclude that even though the window is not very big, that we have to proceed with some infrastructure in the country, or we are back to square 1. We are going to recover only to find that we do not have adequate transportation, or we do not have some of the other things that are necessary.

Dr. **Bahl**. Maybe in light of how confusing I must have sounded, let me take a minute to address what you have said. The problem is who is going to provide the help. Take the case of the State where I live, New York. We have serious short-term and long-term fiscal problems. It is a State that is not growing. The per capita personal income in New York is around 8 percent above the national average, but State and local governments in New York are spending 40 to 50 percent above the national average. In the long run, our income relative to the rest of the country is declining, and we are taxing about 50 percent higher than in the rest of the country.

Now, what to do? True enough, the infrastructure needs are great. Would you suggest that a New York should begin to borrow long term against that kind of a declining taxable capacity in order to renew its infrastructure? If so, and if you take account of the kind of maintenance that is going to be required in the long run, you are saying that New York is going to get even further out of line in terms of its taxable capacity. I guess that is the sort of dilemma that many States find themselves in.

Chairman **Domenici**. I guess in a nutshell, I am saying it will not be too long before the Federal Government will reorient some of its priorities toward infrastructure assistance. Even though this budget has $7 or $8 billion more in highways, water and sewer, and airport reconstruction, for the next 5 years, it has about $8 billion more than previous years, and that is because we passed user fees. The airlines are paying some, the automobile people are paying some, as you know, but I think we are going to have to recognize the enormous infrastructure deficiency. It is just a question of how do we end up doing it. Do we just throw all the money at it with a new list of categoricals, or do we use some new and innovative way, and when do we do it? I do not think we are going to get by without doing some of it, substantially more than we have been doing, over the next 10 or 15 years.

Dr. **Bahl**. Though I would say that if State and local government money is required, I do not think much of it will get done over the next 10 years.

Chairman **Domenici**. I understand. When I am saying "we," I am saying the Federal Government.

Dr. Petersen, I noticed you wanted to say something.

ONGOING CONCERN OF MAINTENANCE AND OPERATION

Dr. **Petersen**. I do not really have a lot to add, except to underscore something that Roy Bahl pointed out that is important in these problems of infrastructure finance.

Simply putting the bricks and mortar in place is but part of the problem. The ongoing concerns of maintenance and operation—you all are familiar with the studies that have been done regarding waste water treatment plants and, what happens when you use 1960's technology is 1980 plants. Unfortunately, Washington Public Power Supply System was the very latest in nuclear technology, but it took them much longer to build it than they thought it might. They have had to eat a lot of capitalized interest and the problems of high technology and high interest rates go on and on and on.

I think the healthiest contribution aside from going over the details of where the capital is to be brought up is taking a considered and longer term perspective of capital financing. The markets that Mr. Roberts was brought up in—I tend to recollect that we had 15 and 20 years ago markets where one could contemplate 30-, 40-, even 50-year financings. That perhaps was a heyday for long-term capital spending in this country. The volatility in all the markets, the municipal securities market being held enthrall to the United States Tax Code, its making these lemming-like surges simply to beat the latest barrier—I think this is very disruptive to the longer term, strategic thinking in terms of public capital improvements. I would hope that we realize that infrastructure by its very definition is going to be around for a very long time, and we have to make sure that we provide financial and institutional underpinnings to keep it in repair and keep it going. I think this is one of the more significant problems we have with a lot of the capital stock that is out there now. It simply is not being maintained or operated at levels because the ongoing financing was not provided.

Perhaps the user charge system, where the taxpayer, perhaps unwittingly, through bond covenants, is tied into all kinds of performance in the future, is the way to go. This may be the era of public enterprise financing to solve our capital needs. I do not know. These are technical issues, but that option clearly should be considered.

I ask that although perhaps there are some collateral benefits to capital spending in creation of jobs and so forth, that that not be a primary motivation. I think there are other ways you can create jobs less expensively out of the public purse. Capitol spending aids should be seen as an opportunity for some rethinking and redirecting of priorities.

Since I am giving a little sermon, I think the No. 1 economic priority has to be giving consideration to raising Federal revenues and reduction of the deficits. I really think we have reached the point in the country now, with the competition between the Federal financing needs and that of the private sector and State and local governments, where each dollar you can raise through taxes instead of borrowing is going to free up a dollar that can be invested somewhere else in the economy. I think we have really hit a standoff in deficit spending.

In terms of the uses of tax exemption, I know Mr. Roberts and I will have some deviations on this point. I do agree it is a precious asset to State and local governments. I think that clear consideration has to be given to the cost if we overuse tax exemption, and that it should be targetted to reinforcing these purposes and desires of creating public infrastructure as economically as possible. It cannot serve every purpose.

Chairman Domenici. Thank you very much.

Mr. Roberts?

INFRASTRUCTURE BANK FUNDING

Mr. ROBERTS. A couple of points, Mr. Chairman.

One is that—and I certainly do not want to criticize on Governor Kean's plan after he has left—but as I understand it, he plans in part to fund this infrastructure bank through State borrowing, as well as through the Federal money that would be flowing into that bank. Is that correct?

Chairman DOMENICI. I would assume part of it could be. I would assume that at least the revolving part might be borrowed.

Mr. ROBERTS. This seems to be a first cousin to State bond bank plans that have been undertaken previously with minimal success, in our experience. Senator Chiles, you might remember from your days in the Florida legislature when Florida authorized the issuance of hundreds of millions of dollars' worth of so-called pollution control bonds, the proceeds of which would be loaned to local governments for water and sewer needs. The thought was—and I think a somewhat legitimate thought at the time—that the credit of the State of Florida would permit the borrowing of money in the capital markets at a cheaper rate, and that the cities would not be burdened with as high debt service payments as they would be were they to borrow directly themselves.

What happened really—and this again is akin to a bond bank—was that the needs of big cities in Florida, like Jacksonville and Tampa, for example, were accommodated from this pool of funds. Those folks did not need help as far as market access was concerned, and they soaked up most of the money. And the very marginal benefit that they got from the State's rating in the bond markets was overshadowed by what the State suffered in terms of weakening its overall credit by adding to its debt and having its statement show so much more on the liability side. It is costing the State of Florida, even though it is still an excellent credit, more money to borrow for State needs than it would have if that debt were not there.

GOVERNMENT CAUSING MARKET DISTORTIONS AND DISRUPTIONS

Second, I would like to echo Dr. Petersen on what the various actions at the Federal level do to our market, causing, as he describes it, a lemming-like rush to the trough. That is one of the points I was trying to make: Every time the Federal Government does something or imposes a deadline or threatens to do something with the tax-exempt constitutional right, you get these distortions and disruptions in the market with their harmful impact. In the face of that, our market has still managed to operate very efficiently. The point I would like to make is that the fewer disruptions that we see, the better we can operate even more efficiently. And I do not believe, with all due respect, Mr. Chairman, that need things like the taxable bond option or any Federal or State infrastructure banks, when we are operating efficiently as we are now doing it.

Senator CHILES. Well, Arch, on the one hand, you are telling us how flexible this municipal borrowing is, and on the other hand, you are saying: "Do not do anything, do not change anything, because we cannot stand the change."

Mr. **Roberts**. No. I am saying we are very flexible, and we can accommodate the needs of the State and local governments. We do get out-of-kilter, however, when the Federal Government does anything to tinker with the mechanism by way of——

Chairman **Domenici**. This is not tinkering with the mechanism. What is tinkering with the mechanism is that Congress continues to look at how big we should let that program get. We are not talking about that here. When they set deadlines and say one activity has got to stop, or we are only going to clear those for another year and a half, that is tinkering. This is not tinkering.

You are suggesting that we ought not consider any additional means of permitting State government to help local governments financing things like sewer plants, because you have all the answers. That is just not true.

Mr. **Roberts**. I think we are working rather efficiently as it is, and to overlay another level of bureaucracy——

INFRASTRUCTURE DETERIORATING EVEN WITH MORE BORROWING

Senator **Chiles**. Well, it is sufficient from the standpoint that you are selling a hell of a lot of bonds and which is going up every year, but if you look at the bank of infrastructure that is in disrepair, it is not efficient or worth a hoot. If you look at the problems that are out there and that have built up over the years, and if you look at the money that we put out in grants and which we get no multiple for because it was all on a cash basis—from where you are looking at it, I think maybe you are right. It is very efficient, very effective. It is going up like crazy every year. I mean, the States are using more and more, borrowing more and more. We have got to look at it from the other standpoint: What are we getting? What is happening to the roads, what is happening to the sewers?

Mr. **Roberts**. They are deteriorating.

Senator **Chiles**. Right. They are deteriorating while borrowing is going up. So you have got to——

Mr. **Roberts**. Well, to me it is much more a State and local government problem.

Senator **Chiles**. Well, it is a financing problem, though, isn't it?

Mr. **Roberts**. Not a severe one. Of course, my judgment might be a little colored by living in Florida, in one of the growing States. But I do not know of a single community in our State, and for that matter, in much of the Southeast, that has a severe problem taking care of its own infrastructure needs.

Senator **Chiles**. Well, infrastructure includes roads, and if we did not have the Federal Government helping with roads, Arch, we would be up the gazoo.

Mr. **Roberts**. Well, that may be true. I am not arguing with the Federal roads program.

Senator **Chiles**. Well, when you are talking about infrastructure, what are you including in infrastructure? You are not including our bridges, you are not including our roads.

Mr. **Roberts**. Sure; why not? We do a lot of toll bridge and toll road financing in our markets.

Senator **Chiles**. I guarantee you, we would have never gotten the Key West Highway done if it would have been the State——

Mr. ROBERTS. I am not arguing with that, but there are a lot of infrastructure needs that can be addressed very efficiently at the State level. The Florida Turnpike, for example, is one of the most efficient financing mechanisms that you can name, and bridges can be financed——

Senator CHILES. It made a fortune for the bondholders.

Mr. ROBERTS. Well, I do not know about that——

Senator CHILES. It helped get me elected to the U.S. Senate.

Mr. ROBERTS. My good friends at the AAA would probably argue with the use of any kind of toll financing, but it has certainly produced a number of outstanding projects, as in Governor Kean's State.

Chairman DOMENICI. Let me say, you have agreed whole-heartedly with Governor Kean's proposal, because what you have said is let the State and local governments take care of things, and that is really all they are suggesting. The change in the sewer financing program of the United States, which is the genesis of the bill, is saying nothing more than this. You come down and take a look at our proposal. We do not want any money you were not planning to give us. Just let us use it through this banking structure rather than a partial grant to each of the facilities that end up getting their application approved. And they think they can get more for their money. That has nothing to do with us. It is just saying instead of granting the money, grant it to our bank, and set any kind of rules you want, and we would like to prove that in 10 years, we will cover more sewer facilities for our people than you will let us, at no more cost than it is now costing under this very complicated system. And that ought to thrill your heart. Why would you be opposed to that?

Mr. ROBERTS. I wish them well.

Chairman DOMENICI. OK, well, that is a very good observation. Maybe it will not work. That is a different approach, much different. But he has not done this without some very good advisors, and they put it all down on paper, and they have had the best financial advice available that says it will work.

OPERATING GRANTS

Mr. ROBERTS. I think there is one thing we had not addressed a little bit, and that is Dr. Bahl's remarks that if we do all this, and we increase the capital investment, what do we do about the operating grants. You know, mass transit, one of our big things right now, is that every locale is saying, "Don't cut those operating grants." That was the gist of the testimony of our new Secretary before Senator D'Amato of New York yesterday, was, "Wait a minute. You are cutting the operating subsidies and the operating grants." What are we going to do about that after we finance this capital bank?

Chairman DOMENICI. Well, I do not know that there is any difference, Senator Chiles, between the situation now and then, that we have now versus that. I mean, we have water and sewer facilities that are an absolute disgrace. Some have been funded with his wonderful bonds that are fantastic, that are sitting there with no operating money, that are sitting there, ultramodern when they built them, and already out of date, but we are not changing that in any respect——

Senator **Chiles**. Except if we get more capital for our buck; if we get more of this for our dollars if we put it out there, we are changing some. We are magnifying the problem.

Chairman **Domenici**. I would welcome that kind of magnifying, but I am not sure that we know how to solve it with categorical grants for sure, because we proliferate it; we build it and then we have no idea. So at least if they had some control, they might provide some incentives and reasonable requirements of their own.

Dr. **Bahl**. If I may, I think there is a point to be made about that. The States are so different now. New York had 18-plus million people and was the largest or second largest State, but has lost a million people and is going to lose more. Maybe someone in New York wants to think about what are our needs in terms of how much new capital facility do we need versus how much do we need to spend on maintaining a smaller plant, whereas a Florida would be exactly the opposite, a growing State, has need for more new capital investment. So a uniform Federal policy that treats all States the same would miss the boat, wouldn't it?

Chairman **Domenici**. Oh, there is no question about that.

TAX-EXEMPT/TAXABLE RATIO

Senator **Chiles**. One other thing I want to just briefly touch on because I think Arch was certainly touching on this in his testimony. It was mentioned by, I think, some of our other witnesses that there is a change already in the structure of the interest that we are paying on the tax-free bond, by virtue of what we have done in the tax structure, going from the 70 percent to the 50 percent, and we have seen that there has been an erosion—and I think your testimony was pointing this out—in the difference, that the municipalities used to get a lot more for the tax-free bond; they were getting about twice as much, an interest rate of about half. Now we see that has really closed tremendously. Maybe the high interest rates generally had something to do with it, but also the tax structure and I do not know what else. But how much advantage now is there to the municipalities with regard to the tax-free bond? As we go into this whole debate on the flat tax, flat rate, you know, if something like that was going about—at one time earlier, we talked about making up the difference to cities by going on and saying we would recognize we had to increase their grants, but the trade-off would be that way. Are we giving a big advantage to, again, some taxpayers and not getting an advantage back to municipalities and the people as a result of that, or where do we see where those curves cross?

Mr. **Roberts**. I think the point you are trying to make is that as the tax-exempt/taxable ratio increases, there becomes a point where it is an inefficient——

Senator **Chiles**. Yes; where we are giving away Federal revenue, and the cities are not getting an advantage, a requisite advantage, from that. If the cities are getting an interest rate of 50 percent of what they would have to pay—and at one time, they actually got that—then there is a great advantage. If the cities are getting a fractional change, and yet the Federal Government is giving away sizable revenues by the tax-frees that are now being used, and all these other devices, too, at what stage does that become unproductive from the Government's standpoint—not from the bond seller's standpoint.

Mr. ROBERTS. Well, I would phrase it a little differently than "giving it away." It is a constitutional privilege. And I think you are underscoring the point that I was trying to make earlier. It is not just Congress; it is the Treasury, also, that keeps nipping away and creating doubts and uncertainties as to whether investors' bonds are going to continue to be tax-free or not, and this causes this narrowing of the ratio. We think that is the greatest single cause of that particular phenomenon.

Bond buyers do not like uncertainty, and they are going to demand a higher rate of return on their investment the more uncertainty is generated and that keeps them from sleeping at night. I think that probably is the greatest single cause of this narrowing the gap between taxable and tax-exempt rates.

Senator CHILES. Dr. Petersen?

DIMINISHING INTEREST COST ADVANTAGES

Dr. PETERSEN. Well, I think there are some other aspects, as well. You are asking about the diminishing interest cost advantages, and I do believe that is the case. Not only that, but we were discussing earlier in the proceedings, about the volume of long-term borrowing versus short-term borrowing. Particularly in 1981 and 1982, long-term borrowing presented quite an analytical problem. What was nominally long-term borrowing was, in fact, in many cases, not very long-term borrowing at all—there was a terrific shortening of maturities at high rates of interest. When you talk about debt burden, the total amount of debt outstanding, you are talking about something that is one—dimensional. When you are talking about repaying debt, you are talking about something that moves through time, annual debt service payments. As governmens shorten these maturities, they are repaying the debt faster, at higher rates of interest. So if you look at the annual debt service requirements on much of the tax-exempt debt sold, you will find they are very large in comparison to what they used to be. Hence, my remarks about how we used to be able to think about a 30- or 40-year bond issue, and now we see a lot of bond issues that are 10 and 15 years in life. In some cases, to be saleable, it may have something like a 5-year put option. Investors can return the bonds for payment if they wish. This has introduced a lot of illiquidity for issuers, and has also occasioned the necessity of guarantees, letters of credit, and so forth, which unfortunately are not costless. Typically, such credit enhancements are paid for by just issuing a few more bonds to pay those premia, and that generates more borrowing.

One of the factors that I have been concerned about is this clumping down of the outstanding debt into the very immediate future and the kinds of burdens that presents from the standpoint of continually recycling debt. I think a lot of people out there are sending up prayers that they can have some refunding issues here.

But as soon as the market trips down a little bit and the refundings start coming on, the volume grows, and it is just built in that rates will rise, it is a self-cycling machine.

The kinds of tax changes that we have seen over the past 2 or 3 years have for the most part been detrimental to municipal bond demand. Municipal bonds have had a preferred situation in terms of being tax-exempt from Federal income tax on interest, and that has been a great advantage in the market, year in and year out. Unfortunately, what has happened is that Congress has created a lot of competing shelters, other ways to exempt income from taxation. The corporate income tax seems to be in a state of demise right now. We used to depend on that corporate income tax to thrill the bankers and property and casualty companies who, hopefully, were earning some profits, to come in and buy municipal bonds. The municipal bond market in the sixties was dominated by the demands of the commercial banks for tax shelter. It was also a very good period in terms of relative interest cost.

In the future, I think that, barring some dramatic reversal of tax policy and thinking, the market is going to be a retail market and that means selling to a lot of individuals. It costs a lot more on a per-transaction basis to sell to the individuals per 1,000 bonds, because individuals gobble up maybe 5, 10 bonds, as opposed to an institution putting away 200 or 300 of them. So the numerous small transactions are going to add to the cost of borrowing.

As Arch Roberts pointed out, there is, with the individual investor a greater need to build in a kind of security. Everybody wants AAA. Nobody wants to ask any questions about the quality of the credit. We are not dealing with a market of only 200 or 300 listed securities. We are dealing in a market that is rich and variegated—6,000, 7,000 issues a year that are reported and a lot that probably are not. It is very diverse. One of the points where Mr. Roberts and I would agree would be that as the Federal Government approaches the infrastructure problem, that should it be mindful of the fact that—and I think Roy pointed this out, as well—you are dealing with a very complex tapestry of local governments and State governments. What may fit in one place may not fit in another. What may seem to make sense for New Jersey may not make any sense at all in New Mexico or Florida. I think a lot of those distinctions and differences in the market are valuable in terms of how people want to make their own decisions. We are going to find as we get into a hard-loan era, as opposed to categorical grants, that people are going to be repaying money, be it to New Jersey or be it to the U.S. Government.

The efficiency in the tax-exempt market—it is a very efficient market from the standpoint of marketing procedures. From the standpoint of the overall economic allocation of resources, if you want to focus it into financing infrastructure, it is not doing a whole lot of that right now. It is a lot more fun to be a banker and an intermediary than it is to be a tax collector. Local government officials and Governors are well aware of the fact that it is more fun to pass the money through than to have to go out and collect it in taxes to repay debt.

Senator CHILES. Dr. Bahl, do you have any comments?

Dr. BAHL. No.

Senator Chiles. All right, sir.

I want to thank you all for attending. I think it has been an interesting panel that we have had this morning.

We will be in recess now until 2 this afternoon.

[Whereupon, at 12:05 p.m., the committee was recessed, to reconvene at 2 p.m. this same day.]

ISSN 0275-1100

Public Budgeting & Finance

Winter 1982
Volume 2, Number 4

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TRANSACTION PERIODICALS CONSORTIUM

JOHN PETERSEN

Creative Capital Financing in the State and Local Sector

This article provides an overview of the reasons for and operation and implications of new capital-raising techniques currently employed by state and local governments.

Creative capital financing, as defined in this article, refers to obtaining capital by means other than the traditional forms of borrowing in the tax-exempt securities market. As such, it encompasses a rapidly growing army of alternatives to the fixed-income, fixed-maturity debt obligation, ranging from modifications in the debt instrument itself to its abandonment in favor of new forms of transactions that entail new forms of risk and reward for issuer and investor alike.

First, the need for such innovation is explained in the context of a review of traditional sources and uses of capital funds and how these have been affected by changes in the economy, budget priorities, and the general environment of fiscal restraint. The stresses in the tax-exempt securities market, their causes and manifestations are reviewed in particular.

Next is provided a review of major types of financial innovations, with explanations of their operation and how these affect both issuers and investors. The article then concludes with a discussion of various broader policy concerns raised by the use of creative techniques and some summary thoughts on their efficiency and applicability as ongoing sources of funds for capital improvement.

CAPITAL NEEDS AND FINANCING

The problems of the unmet capital needs and deteriorating capital of public stock has received widespread attention. The causes are complicated but may be distilled to the following: because of changed political priorities that have put emphasis on current spending, persistent fiscal restraint at all levels of government, and disruptive credit market conditions, states and localities have not been spending enough on the repair and replacement of public facilities. State and local capital spending, which grew during the decades of the '50s and '60s, declined in real terms throughout the '70s and has been particularly depressed in the early '80s.

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Examining the financing of capital facilities provides insights into the current difficulties. The last 20 years have marked a trend away from the use of own-sources by states and localities and, in particular, debt financing and towards great reliance on the federal government. As budget priorities shifted to meet current service and transfer payment program needs, grants for capital purpose—while nominally growing—failed to keep pace with the explosive growth in grants for noncapital purposes. Moreover, capital grants were typically episodic and "single-shots," providing for initial investments in major new projects and not oriented toward providing a financial or institutional base for enhancing and preserving the capital infrastructure once in place.

Table 1 provides a broad perspective on the sources of funds used to finance capital outlays and reflects a general ebbing in the importance of long-term debt and its replacement federal grants. By the last half of the 1970s, states and localities depended on federal grants to finance an estimated 37 percent of their capital spending and, therefore, this component of their spending became highly vulnerable to changes in federal policy.[1]

As recent budgetary cutbacks at the federal level are now withdrawing a major source of capital funds, governments will be forced to rely more heavily on their own sources of financing. This boils down to greater use of current revenue or more debt financing. On the current revenue side, the prolonged fiscal pressures brought on by the wave of home-grown tax expenditure limitations (which has tainted and made difficult all resource allocations to government) and several years of sluggish economic growth (which have depressed current revenues) have rendered that source of very limited help. In fact, the demands on current budgets to keep operations going in the face of insufficient revenues have further restricted capital spending by relocating to current uses funds that otherwise would have gone to capital purposes.[2]

This leaves the alternative that state and local governments should rely increasingly upon borrowing to meet their capital needs. But, unfortunately, many of the same economic circumstances that have led to the deteriorating support for capital spending from federal grants and current revenues have reflected themselves in very unattractive credit market conditions making borrowing a volatile and expensive means of raising funds for capital projects. It is the adverse conditions in the financial market—against the background of unmet capital needs, both public and private, and scarce resources on

TABLE 1
State and Local Capital Outlay Financing
(percentage composition of sources of funds)

	1952-57	1960	1970	1977
Long-term debt	56.0	37.1	51.0	43.3
Federal aid	8.5	20.0	22.0	32.1
Other sources	35.5	42.9	27.0	24.6
Total	100.0	100.0	100.0	100.0

Source: 1952-57, Alan Manvel, "State and Local Government Financing of Capital Outlays," in *State and Local Public Facility News and Aiming*, Joint Economic Committee (December 1966). Data for the subsequent years: George Petersen, "Capital Spending and Capital Obsolescence," in Roy Bahl (ed.), *The Fiscal Outlook for Cities* (Syracuse: Syracuse University Press, 1978).

the current accounts—that form the basis for the surge of creative activity in the realm of state and local finance.

CHANGES IN THE MUNICIPAL BOND MARKET

A combination of cyclical and secular factors have brought rapid and radical changes to the tax-exempt market over the past few years. State and local governments have shared the difficulties of high interest rates and recession conditions that now burden all sectors of our economy. But governments have come in for some special problems over the last year. These arose in large part from simultaneous changes in the federal tax code and reductions in the federal budget commencing in mid-1981. To these changes, which reduced investor demand for tax-exempts and yet made access to that market even more important, must be added the pressures brought by restrictive monetary policy and a continuing growth in private-purpose tax-exempt borrowing that swelled the supply of the tax-exempt securities in the midst of weak demand for such securities, particularly in the long maturities.[3]

The pressures in the tax-exempt market can probably best be measured by comparing its cost of capital to those in the taxable markets. Over the past two years the value of tax exemption as a means of reducing interest rates has been severely eroded. As a consequence, the borrowing costs for state and local governments has risen faster than the general rise in interest rates. As Table 2 shows, tax-exempt rates have shifted from a historic range of 65 to 70 percent of comparable taxable bond yields up to 80 to 85 percent in the long-end of the market.

Changes enacted in the Economic Recovery Tax Act (ERTA) of 1981 contributed to systematically higher interest rates for municipal bonds. Several provisions of the Tax Act relating to individual taxpayers had adverse consequences for tax-exempt interest rates relative to those on taxable securities. Among these were the following:

- Reduction in personal income tax marginal rates, especially the lowering of the top bracket from 70 percent (on unearned income) to 50 percent for all income. The rate reductions are scheduled to continue through indexation commencing in 1985, with long-term prospects for progressively lower rates into the future.
- Reduction in the capital gains rate, which dropped from a maximum of 28 to 20 percent. Over the long haul, this change accented the attractiveness of holding equities in comparison to fixed-income securities, such as municipal securities, a particularly important tradeoff in the case of wealthy investors.
- Expansion of various competing income-sheltering opportunities in individual retirement savings plans (IRA and Keogh), the partial exemption of interest income, the Utility Dividend Reinvestment Program, and the creation of the All Savers Certificate. The latter wrinkle represents a widely available tax-exempt, short-term instrument that is federally guaranteed.

On the corporate tax side of the ledger, the following provisions in the new tax law have had adverse impacts on tax-exempt issuers:

- Rapid expansion under ERTA of leasing tax shelters (the Safe Harbor provisions). This has permitted firms to sell tax benefits to the highest bidder, thus creating billions of dollars of tax-shelter investment opportunities to compete with tax-exempt securities.

- Increase in the investment tax credit (ITC) and accelerated cost recovery schedules (ACRS) which generally enhanced the after-tax economic rate of return on private investments, thus lessening the need for tax shelter from municipal securities because less income would be subject to taxation.

Reducing the need for shelters and the expansion of income sheltering opportunities available to individuals and corporations proved to be especially ill-timed. In further reducing investor demand for municipal securities, the new tax laws compounded longer-term problems caused by generally poor economic conditions—recession and high interest rates—and changing investment objectives. Demand for tax-exempt bonds by the two major institutional investors, commercial banks and property/casualty insurance companies, practically evaporated in 1980 due to poor profitability (and competing tax shelters). Commercial banks since the early 1970s have been shifting portfolios away from tax-exempt bonds. Through much of the decade this shift was offset as property and casualty insurance companies increased demands and kept the long-term market buoyant. Banks and insurance companies together in the late 1970s acquired 80 to 90 percent of new increases in municipal bonds, but they have shown only minimal interest in tax-exempts since 1980. In both cases, the major culprit was the reduced profitability of doing business. Property and casualty underwriting losses have grown to high levels, with only slow recovery in prospect.

In one sense, the reaction of the market to the withdrawal of the institutional investors has been traditional and that is in the heavy reliance on individual investors to absorb the supply of new tax-exempt securities. The percentage of outstanding tax-exempt debt held by individuals (and mutual funds) shot up in 1981. According to preliminary flow-of-funds figures for the first quarter of 1982, the household sector and funds were absorbing about 70 percent of the new supply of tax-exempt debt.

Of help in mobilizing individual investment has been the meteoric growth in investments by tax-exempt funds. Particularly important has been the growth in the tax-ex-

TABLE 2
Bond Buyer 20 Bond Index (Tax-Exempt), Moody's All-Industry Corporate Bonds (Taxable), and Ratio of Rates: 1978 to 1982 II.

Year/Quarter	Bond Buyer 20 Bond Index (Tax-Exempt)	Moody's All-Industry Corporate Bonds (Taxable)	Ratio of Tax-Exempt to Taxable (%)
1978 (yr.)	6.07	9.07	66.0
1979 (yr.)	6.53	10.12	64.5
1980/I	8.56	12.80	66.9
1980/II	7.86	12.32	63.8
1980/III	8.79	12.30	71.5
1980/IV	9.61	13.67	70.3
1981/I	9.97	14.09	70.8
1981/II	10.68	14.89	71.7
1981/III	12.03	15.65	76.9
1981/IV	12.59	15.64	80.5
1982/I	12.96	15.96	81.3
1982/II	12.19	15.55	78.4

TABLE 3
State and Local Debt Sales, 1978-1982

Year	Long-Term	Short-Term	Total	Short-Term as % of Total
1978	$46.2	$21.6	$67.9	31.8
1979	42.3	20.9	63.2	33.1
1980	47.1	26.5	73.6	36.0
1981	46.1	34.4	80.6	42.7
1982*	60.2	42.6	102.8	41.4

* First half annualized rate.
Source: The Bond Buyer.

empt money market funds, which have created a strong demand for short-term tax-exempt paper.[4] During 1981, tax-exempt money market holdings grew by $3 billion, which represented approximately three-fourths of the increase in outstanding tax-exempt short-term debt reported for the last year.

Issuers—facing high long-term interest costs—willingly shifted their borrowings to the short-term borrowing instruments, tailored to match the needs of the funds for highly liquid tax-exempt securities. The growing importance of short-term borrowing—both proportionately and in dollar terms—is depicted in Table 3. Furthermore, as discussed below, many nominally long-term bonds were to take on the characteristics of short-term obligations. As a result, the degree of the shortening of the liability structure of governments is probably greatly understated by the trends shown in Table 3.

Any examination of the difficulties in the municipal bond market and the high costs of borrowing for capital needs would be incomplete without reference to the heavy demands placed on the market by nontraditional uses of funds. Over the last decade a myriad of tax-exempt borrowing devices have been created, designed to raise money at tax-exempt rates which, in turn is reloaned to the private sector for such things as industrial and commercial development, power facilities, student loans, hospitals, and mortgages on private dwellings. Such borrowing, generally considered as forms of industrial revenue bond financing, represents (depending on the definitions) somewhere between 25 and 50 percent of all long-term tax-exempt financing.[5] As a group, such borrowers are powerful competitors with traditional governments for investment dollars. In fact, in the realm of creative financing such non-traditional financing purposes are typically better suited to employ the flexibilities required and to assume the risks entailed in the new financing approaches than are traditional governmental-purpose borrowers, especially the smaller, less sophisticated entities.

CREATIVE FINANCING: WHAT IS IT?

What is "creative" in capital financing is a highly judgmental consideration. Most of the new techniques have historical antecedents in the taxable capital markets, but typically had not been put to use in financing public capital expenditures. Thus, what is novel is the introduction of new loan instruments into the tax-exempt bond market or the creation of some new source of funds that had not previously existed, as an alternative to loans in the raising of capital by state and local governments.

The definition is a "catch-all," one of exception from standard practices: creative financing techniques are those that differ from the traditional means of raising capital through the tax-exempt securities market.

The traditional method has been to sell a straight debt obligation promising regular payment of fixed interest for a fixed period of time and relying for security of repayment upon the creditworthiness of the issuer. Under such an arrangement, the lender is compensated through interest payments not only for the use of money, but also for the market risk (generally, that interest rate changes may reduce the market value of the investment before it is repaid) and for credit risk (the possibility that the obligation or interest on it may not be honored in full or on time). The governmental borrower, on the other hand, faced with a fixed commitment, has had certainty as to the size and timing of payments, a benefit it contracted for in the issuance of the debt. In this sense, the borrower has purchased liquidity in that its debt-related outflows are fixed and certain and it can manage its financial position accordingly.

Creative financing techniques have dealt with rearranging the borrowing transaction by shifting the risk of interest rate changes and, in some cases, of creditworthiness from the lender to the borrower. In addition, they have increased the types of returns available to the investor beyond simply the receipt of regular tax-exempt interest payments. An important aspect of the latter development has been the design of transactions in which governments are able to transfer certain tax benefits of ownership from themselves to tax-paying entities that can use them for tax-shelter purposes. Correspondingly, another and related aspect of creative financing has been to devise ways by which governments themselves can take maximum advantage of financial investment opportunities through the temporary use of borrowed funds as a means of lowering costs. For both private investors and public borrowers, these aspects of creative financing are intimately connected to the peculiarities of the treatment of tax-exempt securities and depreciable assets in the federal tax code.

Before embarking on an excursion among the creative financing techniques, it is important to note that for many devices, a byproduct of creativity has been complexity. As new dimensions are designed and elements added to transactions, it becomes difficult to classify and make comparisons among the alternatives, since so many things can vary at once. Such an amalgam makes determining the innovation's ultimate value in the market place quite difficult because each "deal" has a tailored look that gives it the flair of a special—frequently hard-to-understand—situation. Nonetheless, certain commonalities in technique have emerged, along with a nomenclature that identifies their major characteristics.

In the following sections, several varieties of creative financing instruments are reviewed, with an outline of their operation and advantages and disadvantages. The first items will deal with new developments in the short-time (less than one year) market, commercial paper and demand notes. Next will follow a discussion of a common element in much of the creative financing devices, the expansion of bank credit facility (lines and letters of credit). This is followed by variable rates, put options, warrants, and original issue discount securities that have become important forms in the intermediate- and longer-term markets. Last, there is a discussion of recent developments in governmental lease obligations, with emphasis on the tax-exempt lease purchase and leverage lease concepts. In this necessarily cursory examination, the reader will be directed to added sources of information about the devices by the accompanying footnotes.[6]

COMMERCIAL PAPER AND DEMAND NOTES

Traditionally, state and local governments have relied upon fixed-term notes issued for the full period a borrower expected to need the money at a stated rate of interest. Such short-term borrowings usually carried maturities of six to 12 months and were sold to the public or negotiated directly with banks. Tax anticipation (TAN) and bond anticipation notes (BAN) are examples of the fixed-term note commonly used by governmental issuers.

The advent of tax-exempt commercial paper represented the creation of a new market in the tax-exempt securities area.[7] Commercial paper consists of short-term obligations that are unsecured promissory notes maturing typically within a period of 15 to 90 days. Such paper, therefore, represents very short-term borrowing to meet the high liquidity needs and short investment periods of certain investors. This type of short-term instrument allows for maximum flexibility since issuers and investors are repeatedly negotiating both the term and rate of interest on the securities and several batches may be outstanding at any given time.

Because of the extremely short maturities and the ability of issuers to tailor them to investor needs, rates of interest have been the lowest obtainable in the market for tax-exempt securities. Normally, these have run one to two percentage points below the costs of a publicly sold term note of similar maturity, even after taking into account sundry costs associated with commercial paper.

The biggest drawback to the use of commercial paper by state and local issuers has been the need for size. These programs involve unusually heavy start-up costs and the constant marketing requires ongoing support both from brokers and the administrative staff of the issuer. Furthrmore, a bank line of credit is necessary in the event that commercial paper cannot be rolled over in the market and recourse must be made to a loan to pay off present paper holders. As a result of the need for economies of scale, it is typically not feasible for an issuer to be in the commercial paper unless $20 to $25 million is to be borrowed on a recurring basis.

Although there were efforts in the mid-1970s to establish a commercial paper market, the idea did not really catch on until the high interest rate era of 1979 through 1982. A major factor in the development of commercial paper was the development of tax-exempt money market funds and bond funds as noted above. To meet their liquidity needs and to temporarily house funds seeking longer-term investment in the case of bond funds, these sources provided rapidly growing assets for short-term investment. Furthermore, as bank demand for tax-exempt paper diminished, there was need to create new vehicles to tap rapidly these new sources of demand. As of mid-1982, approximately 30 issuers had an estimated $3 billion in commercial paper outstanding.

Also aimed at the very short-term institutional investment interest are notes that allow the lender to shorten the maturity at its option or to update the rate of interest either through negotiation or formula. The short-term obligations are sold to one or more investors with the understanding that they may demand payment on all or some of their holdings prior to maturity with five to seven days notice. These short-term "puts" are typically backed up by a bank credit facility whereby the bank agrees either to purchase the note itself or to resell it to other investors. Such demand options are of particular interest to investors, such as tax-exempt money market funds, that may have needs for instant liquidity if investors withdraw their funds.

The advantage of the demand note is that the tax-exempt money market funds are typically willing to lend at lower rates than banks. Thereby, if all goes well, the issuer has the advantage of the low rate of interest and, at the same time, recourse to the bank loans only if necessary. The rolling note is yet another concept to permit the rapid adjustment of short-term loans to changing investor needs. Typically, a short-term note is issued whereby, under terms of the contract, the note may be rolled over a number of times, with the rate and maturity often subject to revision over the life of the loan. This type of structure can be particularly attractive in periods of upward sloping yield curves when the rates on the very shortest instruments are considerably lower than those on the regular term notes. Also, under the master agreement, the issuer is guaranteed a market for its securities if they are sold by negotiation. On the other hand, a rolling note structure may leave the issuer uncertain as to the ultimate interest payment dates and rates of interest on its securities. Furthermore, such arrangements typically require a standby agreement with a bank if investors elect to tender their securities early. In summary, the issuer typically takes on higher transactions costs and more complicated arrangements that reduce its liquidity and certainty in order to achieve lower costs, because investors find such obligations highly liquid and subject to low interest rate risk.

BANK CREDIT FACILITY AS LINES AND LETTERS OF CREDIT

An important element in much of the creative financing in the short-term market has been the availability of various credit arrangements with major commercial banks that constitute a back-up source of funds to the issuer and, hence, enhance the liquidity and creditworthiness of the security to the investor.[8] Not all bank credit facilities are the same. They range from informed agreements that indicate a bank under certain conditions will make loans at its discretion to a borrower (a line of credit) through unconditional pledges of a specified amount and term that it will lend. This latter arrangement is typically referred to as a letter of credit, and in effect allows the borrower to enjoy the advantages of the bank's own credit standing in compensation for an annual fee.

The letters of credit are popular with investors because they are typically offered by large national banks with high credit ratings. Thus, the issuer with a letter of credit back-up can expect a lower rate of interest on its securities. On the other hand, the bank credit facility costs money, often equivalent to about one-half of one percent of the unused portion of the back-up amount. Furthermore, if the line of credit must be exercised, the bank typically charges 60 to 75 percent of the prime rate on loans to the issuer in taking out the original investors. The credit facility of the commercial banks meets two needs in many creative financing arrangements. First, and foremost, it provides a mechanism by which the issuer can be provided liquidity in case short-term markets suddenly evaporate and it must come up with large amounts of principal. Second, the strongest letters of credit also provide enhanced creditworthiness, since they will liquidate obligations in the event of a default on the part of the issuer, in effect acting as a guarantee on the loan.

PUTS, VARIABLE RATES, AND WARRANTS

Another innovation, especially when applied to long-term securities, has been that of the put or option tender bond. In this case, the issuer sells a long-term obligation, but gives the investor an opportunity of tendering it back to the issuer in advance of its stated maturity. This creates the potential for the investor's creating at its option a shorter-term obligation. Thus, the investor has the advantage of greater liquidity and protection against capital deterioration due to increasing interest rates. There are several alternatives in the design of a put bond. Typically, investors will have the opportunity to place their securities back with the issuer at par at the end of a specific period of time (five to ten years) after the sale date. In some cases, the put may be available for every year thereafter. In such a case, after the original tender period the securities become one-year instruments and should trade at the prevailing rate for comparable short-term securities. This provides the lender with strong protection against a downside risk and should lead to accepting lower rates of interest on securities with this "put" feature.

For issuers, however, the existence of the put option entails a risk of refinancing sooner than the original maturity of the bond. Thus, put options typically involve a bank credit facility, whereby the bank agrees to take the tendered securities off the hands of the issuer. To provide such back-up, a bank usually charges an annual fee of approximately one point on the outstanding amount of the principal, as well as presenting a relatively high rate of interest for any loans that it must subsequently make in honoring the put obligation. As noted above, the presence of the letter of credit presents an added element of credit consideration in the transaction. In addition to judging the ability of the issuer to meet its debt service requirements, there is also the question of the bank's ultimate ability to provide cash to meet any tender obligation. Since most of the devices are new, there has been no experience with larger-scale recourse to the back-stopping facilities of the bank. Most likely this would occur in a period of high interest rates where most issues with tender options would be exercised. It has been pointed out that such strong systematic risk absorbed by banks could provide problems for those institutions.[9]

As indicated, a primary concern in the municipal securities market has been the need to protect investors against large deterioration in capital value, providing them with ongoing tax-exempt income. One way in which this has been achieved is to tie the interest rates of tax-exempt securities to other rates in the market, thereby helping to keep the securities near par in value and returning the regular income stream. Thus, the investor attempts to trade the uncertainty of the income stream for stability in capital value. The issuer, on the other hand, gives up certainty regarding the interest costs in hopes of achieving a lower level of interest cost by providing the investor greater protection.

Variable or floating rates can be designed in a number of ways, but typically involve tying the tax-exempt rate to a stated percentage of a widely followed taxable security rate (such as those on U.S. Treasury bills and bonds). The frequency of adjustment in the rate is of great importance, particularly when markets are volatile. Some issues have had rates adjust only annually, which in recent markets has led to large deviations in principal value. Most recently, some long-term issues have actually had their rates adjusted every seven days. These rapidly adjusting floating rate bonds are frequently called "lower" floaters, designed like the note issue discussed above to take advantage of the highly liquid short-term needs of corporations and tax-exempt money market funds. When combined with such features as a seven-day call option, the long-term bonds are in effect short-term issues and usually require the kind of bank credit facility discussed above to insure sufficient liquidity if investors tender their bonds.

Another innovation, thus far of limited use, has been that of bonds with warrants in the tax-exempt market. A warrant entitles the holder of a bond to purchase additional securities at a fixed price during a specified period of time into the future, thereby providing a "reverse" put option on the security. Hence, the issuer stands ready to borrow more money at the request of the lender if the latter so decides. Warrants provide value in addition to the stated rate of return on the bond because lower interest rates—higher bond prices—in the future make it possible for holders to invest at higher rates of return than otherwise possible. This moves the warrants to a premium. From the standpoint of the issuer, the willingness of the investors to purchase such an opportunity for future returns should help reduce the cost of borrowing.

The only warrant bond sold thus far in the municipal securities market has been on a Municipal Assistance Corporation (MAC) issue in 1981. It is estimated that the MAC issue carried a rate approximately one-half point lower than otherwise would have prevailed.[10] Nevertheless, warrants may have a future cost if interest rates drop sufficiently to prompt holders to exercise them and thereby increase the amount of outstanding debt. In effect, the issuer, upon the exercise of the warrants, would have to borrow at higher rates of interest in the future than would be the case had the warrants not been used.

DISCOUNTS, ZEROS, AND COMPOUNDING COUPONS

Another innovation in the tax-exempt market has been the rapidly increasing use of original discount bonds.[11] In this case, a long-term bond issue is offered with a stated or coupon rate of interest considerably less than that prevailing on the market. As a result, the bond is sold for a price considerably less than its par or stated value. Accordingly, much of the return to the investor holding the security will be enjoyed through the accretion in the price as the bond approaches maturity. Although discount bonds are not unknown in municipal securities markets, certain clarifications involving the taxability of the capital gain and changing market conditions have served to enhance their attractiveness.

The advantage to the investor in acquiring an original discount security is that a rate of return on the interest to be received is guaranteed and the capital value of the security, theoretically, should appreciate through time as it approaches the repayment date. In effect, part of the investment risk is shifted from the investor to the issuer with respect to the interest on interest component in the total return on the security. In a very long-term issue, the reinvestment of interest on interest component is of overwhelming importance in calculating total return. For example, at current rates of interest (approximately 13 percent on a long-term tax-exempt), the interest on interest component of a 20-year bond amounts to about 70 percent of its total return.

Investors will find discount bonds profitable (and pay more for them) if they believe that rates are near cyclical highs and future reinvestment rates will be lower. Furthermore, they can appeal to investors because a very large par amount of security can be purchased at a low dollar price. For technical reasons, discount bonds can be attractive for certain types of transactions involving tax swaps and to meet various legal requirements regarding pledging and reserves. It is important to note, however, that to qualify for tax-exemption on the element of accretion in market value, the issue must be recognized as an originally discounted offering.

The ultimate discount bond is the zero-coupon bond, which pays no interest prior to the final term of maturity. Instead, the investor looks solely to a very large payoff at the end of the line. Here, the issuer totally absorbs the reinvestment risk. On the one hand, there is no cash flow until the end of the security's life, which lessens transactions costs for both the issuer and the recipient investor. On the other hand, waiting until the very end of the security to receive any income restricts these bonds to investors who have no interest in current income and heightens the importance of the issuer's creditworthiness and ability to pay off at the end of the line.

A recent examination of zero-coupon bonds estimated that issuers had savings of between 60 and 400 basis points, depending on the maturities.[12]

A restraint on the use of the zero-coupon discount bonds is that large amounts of borrowing need to be done to raise relatively modest amounts of capital. Were an issuer to need $10 million, then selling zero-coupon bonds for 20 years at a rate of 10 percent would require issuance of approximately $68 million. Such borrowing could lead to debt ceiling problems (and be difficult to explain to the electorate).

Both the investor and issuer need to be sensitive to the increased credit risk involved in zero coupons. If the issuer defaults, the investor is out of its total investment, since no interest has been received in the interim. By the same token, the issuer needs to practice discipline in providing for the forward commitment through the use of a sinking fund. Protecting the fund (and the issuer's credit rating) could prove to be a chore as large amounts of capital accumulate.

Akin to the zero-coupon bond in most respects is the cumulative or compound coupon bond. Here the interest is compounded and retained by the borrower until payment at maturity. Like the zero-coupon, the reinvestment risk is shifted to the issuer and the yield is locked in for the investor. However, in this case the issuer does not have to issue very large amounts, since the net proceeds are close to par, thus avoiding debt limit problems. The other problems of the large credit risk and requisite reinvestment responsibilities remain for the borrower and investor. The compound interest feature has saved 100 to 150 basis points points where used.[13]

LEASING

Leasing, whereby governments rent use of a property for a limited period of time, has been common in the public sector for many years. For technological and practical reasons, such "straight-base" arrangements can make good economic sense, even though the cost of capital component of the rent is typically greater for a government lessee since, because of tax-exemption, it can typically borrow more cheaply than the private-sector owner/lessor.

Of more recent vintage and controversial have been the various methods of capital financing in which the governmental lessee, in fact, acquires the property through entering into a de facto long-term obligation.[14] There can be several motivations for this practice, in part economic and in part institutional. In many cases, governments have found it desirable to use such leases as a means of acquiring capital facilities in order to circumvent debt limitations, referendum requirements, or other legal restrictions. Additionally, cost-saving motivations can occur because such transactions, if properly structured, can provide the economic advantages of tax-exempt financing and perhaps be coupled with other tax benefits related to ownership (mainly, depreciation and investment tax credit). Gathering up and distributing such benefits among the interested parties in order to minimize the cost of capital is a difficult and perplexing process. Since governments do not pay taxes, such lease arrangements require that the tax-related benefits of ownership be sold off to private tax-paying parties. Furthermore, restrictions on the use of tax-exempt borrowing proceeds regarding the benefits provided to private parties (industrial development bond regulations) and the reinvestment of tax-exempt funds (arbitage regulations) further roil the financial waters. In summary, virtually all the complexities of the federal tax code relating to the legitimate uses of leasing, tax benefits of ownership, and the appropriate uses of tax-exempt financing can be combined into the structuring of capital financing leases involving state and local entities.

Perhaps the most straightforward of the tax-exempt capital leasing arrangements is the tax-exempt lease purchase or installment sale.[15] Under this arrangement, which has flourished in the financing of equipment but has also been used increasingly to finance some major capital facilities, the government-lessee owns the property and the private lessor is permitted the exemption of the interest portion of the lease payment. However, under most circumstances, the tax benefits of depreciation and the investment tax credit are not available to the private party. Such an arrangement has the curious attributes of being tantamount to municipal debt in terms of federal tax law, but, because of certain technical provisions relating to the contingent status of appropriations, will normally not be treated as municipal debt in most states. These lease transactions can be designed to have all the earmarks of a municipal bond issue in order to distribute participations in a lease.

A government may undertake the lease arrangement in the hope of lowering the cost of capital because there is a tax-exempt interest component (and, also, in many cases to avoid the cost and hassle of a straight debt issue). But offsetting these potential advantages can be the greater risk involved for the investor because of the weaker security provided by the lease as opposed to a straightforward debt obligation. It has been estimated that approximately $1 billion in tax-exempt leases were executed in 1981 as compared to $250 million in 1977.[16]

The tax-exempt lease is most appropriate where there is short-to-intermediate-term financing of equipment and the transaction can be kept relatively simple. For certain types of transactions, the advantages of using the tax-exempt financing lease reportedly can be as great as one to three percentage points over those involved in straight municipal bond financing.[17] In larger, complicated transactions involving structures, either state laws must be changed to make the lease virtually identical to a debt financing, or other elements of tax benefits need to be brought into the transaction to render the cost comparable to that under a straight bond sale.

The most complicated leasing transactions and, probably what will prove to be the most specialized and limited in practice, are the tax-exempt leverage leases.[18] These transactions involve the combination of debt and equity capital, with the equity interest obtaining the tax benefits of ownership (normally not available under the tax-exempt lease) and the financing scheme employing some form of tax-exempt debt. Ideally, the equity share, representing 20 percent (or less) of the capital cost of the project, can be leveraged through the use of a large, low-cost debt component so as to maximize the potential after-tax returns on the project for the private investor. These returns can then be subdivided between the public entity and the private investor so that the former reduces its cost of capital and the latter enjoys a generous return.

Needless to say, structuring such an arrangement (except in specialized circumstances permitted under the Safe Harbor provisions of the Economic Recovery Tax Act and certain "qualified rehabilitations") is exceedingly difficult.[19] There is a need simultaneously to overcome stringent federal tax law requirements regarding a "true" lease, a general prohibition against the use of the investment tax credit for assets where the user/lessee is a governmental entity, restrictions on the arbitrage and industrial revenue bonds as they pertain to acceptable uses of tax-exempt interest, and state restrictions on what constitutes indebtedness, sale of property, and public purpose.

The most celebrated tax-exempt leverage lease transaction to date has been that performed by the City of Oakland in its museum financing.[20] The city sold revenue bonds to rehabilitate a facility which was subsequently sold to private investors. Acquisition of the property by investors gave them assorted tax benefits. The city then agreed to lease back the facility. In order to meet the cash-flow requirements for that lease and to buy back the structure, a separate structure was sold to the private group and leased back by the city. The proceeds of the second transaction (which was financed by the sale of industrial development bonds) were invested so as to permit sufficient return to service the debt on the revenue bonds that were sold to finance the improvements on the first structure. When all these transactions are calculated and settled, the lease payments on the improved facility by the city reflect the tax benefits going to the private investors, thereby lowering overall project costs by approximately two percentage points. Such tax-exempt leverage leases may be appropriate for hospitals, courts, terminals, convention centers, and certain housing projects. They are especially applicable where the facility has an income-earning opportunity.

Another option, somewhat along the same lines, is for the jurisdiction simply to sell the facility to private parties. Because of the decline in the differential between tax-exempt and taxable rates, the existence of tax benefits might make the cost of capital cheaper in the private sector than in the public sector. This is particularly true where a government may find itself with a very weak credit standing. In such a sale, the proceeds could be reinvested to meet operating costs or to pay for some other improvements. The disadvanage in capitalizing the capital asset is that the jurisdiction loses control, unless its intrinsic public nature allows the facility to be protected in its use by some form of regulation of its new owners.

The tax-exempt leverage lease and related financing devices have been made more available through selective legislation at the federal level. The Safe Harbor provisions of the 1980 Tax Act made these devices particularly attractive in the areas of mass transit and, curiously, volunteer fire departments. More recently the Tax Act of 1982 has extended certain provisions to the areas of waste treatment and energy-related facilities.[21] But aside from these special cases, the tax-exempt leverage lease remains an expensive and elusive combination of benefits for state and local governments to package and sell in hope of lowering their cost of capital.

POLICY IMPLICATIONS

The above review of the technical aspects of creative financing devices illustrates that not all the creativity is restricted to the financial mechanisms involved. New ways of conducting the public's business, new costs, uncertainties, and institutional settings are also involved. These raise many broader policy questions as to the desirability of employing the new techniques, concerns ranging from the ability of governments to assume greater risks to the implications of complicated legal and financial relationships that may be developed in the process of becoming more creative.

Shifting Risks and Reduced Liquidity

Most of the innovations in the new tax-exempt instruments involve governmental borrowers who attempt to lower cost by accepting more risk through more short-term liabilities, uncertain maturity terms, or variable interest rate payments. That not all tax-exempt borrowers are in a position to handle such uncertainties by themselves is a fact recognized by the market, hence the insistence upon bank credit facilities (or some other form of backup) to provide liquidity, or, in some cases, to unconditionally guarantee repayments.

Issuers can expect to receive lower interest rates by keeping their debt short, but care must be taken lest their structure of debt becomes so short and the amount so large that they must constantly worry about recycling. Over the years, municipal fiscal crises have been associated with the difficulties of rolling over large amounts of short-term debt with not enough willing buyers in sight. Aside from the possibility of default, borrowers as a practical matter will find their financial affairs tightly tied to the apron strings of the financial markets and banking community.

Complexity and Conflicts

Many of the new devices are technically and legally complex and can tie governments into long-term, inflexible relationships with a multitude of outside parties. Transactions can involve investment bankers, commercial banks, insurers, other governments, vendors, trustees, and investors—each with a set of interests to protect and returns to maximize. This puts a premium on outside (and expensive) expertise and carefully crafted legal relationships, where one weak link can weaken or destroy the entire financing framework. Under these circumstances, the debtor government, in order to gain some immediate monetary benefits, may find itself in the future no longer in command of its affairs and faced with a potential of numerous and expensive lawsuits if it or other parties began to stray from legal requirements.

Fragile and Uncertain Markets

As with most new financing devices, those in the governmental area must contend with the costs of novelty. In consequence, most of the innovations have been developed through protracted negotiation and sold to investors on that basis. But nobody knows whether subsequent transactions using similar techniques are viable or, which is important to investors, how well an investment will hold its value in the secondary market. To the very great extent some techniques are geared to specialized investor needs or peculiar market conditions, the cost-saving circumstances once available may swing around to one of high costs and indifferent or hostile market reception. Thus, to be there early and to be prepared to move quickly are issuer attributes for many of the new vehicles.

Overhead and Other Costs

Most of the creative devices depend on doing things differently, with the requisite need to develop new skills and procedures that often are predicated on new legal powers and encompass new aspects of and forms of compensation. For example, commercial papers require heavy start-up and continuing costs, and the most creative leasing transactions require vast amounts of complicated legal work. Since the lead time is often considerable (several months), issuers need to be aware that both interval resource requirements and outside bills can accumulate in the process. A careful and realistic analysis of the likely costs of alternatives is necessary before the die is cast in any one direction.

Legality and Political Explicability

Many of the new techniques are not only on the frontier of market acceptance but, not unrelated, are on the fringe of the legally acceptable. Meeting various federal regulatory requirements to qualify for tax benefits requires specialized skills on the part of both brokerage firms and tax lawyers. Moreover, a new element of risk is added: laws can be changed rapidly or court decisions and IRS interpretations can be adverse, blowing arrangements in progress out of the water.

Things may be legal but still difficult to sell popularly. The sale of public properties, selling bonds that are nominally worth much more than the proceeds, sudden surges in debt service costs because of variable rates or "put" securities—all these may be economically feasible, but expose political leaders to criticism.

Importance of Size

Generally speaking, the creative devices are most advantageous to larger issuers that have sophistication (or can buy it) and to those with the greatest flexibility (and least public accountability) in managing their affairs. While the advantages of scale are generally present in financial dealings, the big borrowers' added advantages in gaining access to turbulent markets may further handicap smaller and less sophisticated governments in attracting capital. With limited investor demand for tax-shelters, the widespread use of tailored issues by the larger and better positioned borrowers (frequently for purposes of supporting private activities) may further tip the scales against traditional infrastructure uses.

It is beyond the scope of this article to prognosticate on which of the creative devices described above will survive as market conditions change. If, in fact, interest rates remain volatile and the demand for highly liquid investments remains strong, the advantages of variable rates and investor-option maturities will continue to be attractive. Fiscal restraints, technological change, and the continued prevalence of debt limitations will also promote a continued use of leasing arrangements.

A final implication to consider is that, for the reasons discussed above, the creative devices lend themselves best to larger issuers who are able to operate in flexible financial environments, removed from the political fracas that surrounds annual tax-supported budgets. Hence, their continued use will increase the pressure on state and local issuers to consolidate borrowings to enjoy economies of scale and to remove capital spending and financing decisions from the traditional budgeting and spending processes. As noted, the largest independent authorities and various industrial development bond borrowers have been able to make the greatest use of new devices. Thus, it may be that to remain competitive in raising capital, traditional issuers will need to press for more independence and less public accountability in their quest for more and cheaper sources of funds.

NOTES

1. See John E. Petersen, "Financial Roundup: Public Capital Crisis?" *Resources in Review* (July 1982), p. 5.
2. In fact, the occurrence of large operating deficits and cash flow shortages have switched current operating budgets from capital fund providers to demanders of credit, increasing the competition for funds in the market.
3. For recent reviews of the changes in the tax-exempt market and their causes and implications, see John E. Petersen, *Has the Municipal Bond Market Undergone Fundamental Change?* (Washington, D.C.: Government Finance Research Center, May 1982).
4. See John Fitzgerald, "Localities Rush to Short-term Market for Funds," *The Daily Bond Buyer* (May 1981), p. 1.
5. See John E. Petersen, *The Municipal Bond Market: Recent Changes and Future Prospects* (Washington, D.C.: Government Finance Research Center, January 1981).
6. A general survey of creative capital financing in the state and local government area is provided in L.D. Shubnell and W.W. Cobbs, "Creative Capital Financing: A Primer for State and Local Governments," *Resources in Review* (May 1982); Peter E. Trent, *Emerging Opportunities in Tax-Exempt Financing: Perspectives of the Marketeer* (New York: Shearson, American Express, June 1982); Merrill Lynch White Weld Capital Markets Groups, *Tax-Exempt Financing Options* (New York, undated); and Municipal Finance Officers Association, *Creative Capital Financing*, Seminar Notebook, June 1982.
7. Byron Klapper, "Municipal Commercial Paper," in Standard & Poor's *Perspective* (Standard & Poor's Corporation, September 1980). Regarding new short-term instruments in general, see also Morgan Guaranty Trust Company, *Short-Term Financing Alternatives* (New York, undated).
8. See Trent, Morgan Guaranty Trust Company, and Merrill Lynch White Weld Capital Markets, op. cit. Bank credit facilities are not without controversy, see J. O'Shea and L. Cohen, "Letter of Credit Activity Getting a Careful Reading," *Chicago Tribune*, April 1982, Section 5, p. 1.
9. Trent, p. 15.
10. Merrill Lynch White Weld, p. 11.
11. One form of original discount bond, the zero-coupon bond, has the longest maturity, but the general principles are the same. See Ronald Forbes and Edward Renshaw, *Tax Exempt Zero Coupon Bonds* (Albany: State University of New York, undated).
12. Merrill Lynch White Weld, p. 4.
13. Ibid., p. 7.
14. For reviews of the types of leases and their development, see the Leasing Sections of Municipal Finance Officers, *Creative Capital Financing*. See also, Frieda K. Wallison, "Tax-Exempt Lease Financing Gains Attention as Economic Conditions Change," *The Daily Bond Buyer*, November 1981, p. 9 et seq.
15. See G. Eden, "The Tax-Exempt Leasing," in Municipal Finance Officers, *Creative Capital Financing*.
16. Ibid.
17. Shubnell and Cobbs, p. 8.
18. See Goldman, Sachs & Company, *Tax Exempt Leverage Leasing Financing for the Public Sector* (New York, June 1982); Government Finance Associates, *Potential Sources of Capital Financing Available in Economic Recovery Act (ERTA) for Certain Public Improvements* (Princeton, N.J., draft, January 1982).
19. Frieda K. Wallison, "Benefits of ERTA Available to the State and Local Bodies," *New York Law Journal*, March 1982.
20. Goldman, Sachs & Company.
21. "Key Bond Related Provisions of Tax Bill Conferees," *The Bond Buyer*, August 1982, p. 15.

AFTERNOON SESSION

The committee met, pursuant to notice, at 2:10 p.m., in room 6202, Dirksen Senate Office Building, Hon. Pete V. Domenici (chairman of the committee) presiding.

Present: Senators Domenici, Gorton, Chiles, and Exon.

Staff present: Stephen Bell, staff director; William Hoagland, senior analyst for physical resources; Richard N. Brandon, minority staff director; and Lisa Faulkner, analyst for general government and general purpose fiscal assistance.

OPENING STATEMENT OF CHAIRMAN DOMENICI

Chairman DOMENICI. The hearing will please come to order.

I am pleased to welcome our three distinguished witnesses today. Each is uniquely qualified to testify as to the status of science and technology in this country.

Dr. Jay Keyworth is Science Adviser to the President. I am also pleased to note that he was formerly associated with New Mexico's Los Alamos National Scientific Laboratory. Dr. Keyworth has made substantial progress in defining a national science policy and making recommendations to the President on how to implement that policy.

Dr. James Rutherford, chief education officer of the American Association for the Advancement of Science, was formerly the assistant director of the National Science Foundation.

Dr. Gordon Moore is the chief executive officer and chairman of INTEL Corp. Dr. Moore founded INTEL and was cofounder of Fairchild's semiconductor division.

I believe it is obvious that this country's history has threaded through it a history of successes and achievements. Many of these are a direct result of science, technology, and innovation. There has always been a commitment to technology innovation and a desire to make things better. That commitment, along with our constant push to learn more about things around us, about science, the planets—all those things that might affect that general thrust to make things better has been the driving force.

For a long time, we have been recognized as the world leader in science and technology. There are some who say that our position of leadership is threatened, that the Japanese, the Germans, and others are moving out front while we look on. I do not believe that that is going to be our fate. We have always risen to the challenge, and I am confident we will do it again, if, in fact, we have taken second position, which I believe is doubtful.

UNITED STATES LARGEST SPENDER FOR RESEARCH AND DEVELOPMENT

A recent report from the National Science Foundation, "National Priorities of Science and Technology Resources," indicates that the United States spends more money annually on research and development activities than any other nation and twice the amount spent by the other major Western countries and Japan combined. Relative to the GNP, U.S. Research and Development expenditures have been equal to those of West Germany since the early seventies, with the United Kingdom and Japan close behind.

The purpose of today's hearing is to discuss science and technology as they affect our future growth. Science and technology are integrally related to the economic problems that beset us. It is important to bear that in mind as we attempt to formulate and implement the programs and policies which are a part of this Nation's fiscal program.

In the 1984 budget, the President has requested a major fiscal commitment to research and development. I would be interested in hearing from all three of you on this effort. The budget proposes to increase research and development by 17 percent above 1983. As we figure it, that is a base of about $47 billion. Dr. Keyworth, I am anxious to hear your comments on the administration's proposal.

I am particularly pleased with the way this increase is targeted, toward the areas which seem to have the greatest potential and conversely, where we are doing least.

I have additional remarks. I am going to make them a part of the record. At this point, I want to indicate that this committee is genuinely interested in research and development in the Federal budget as part of its target-setting process. There is no other area which has more potential for the future growth of this country. We thank all three of you for agreeing to testify today.

Prepared Statement of Chairman Domenici

I am pleased to welcome our three distinguished witnesses today. Each is uniquely qualified to testify as to the status of science and technology in this country.

Dr. Jay Keyworth, is Science Adviser to the President and was formerly Director of New Mexico's Los Alamos National Scientific Laboratory. Dr. Keyworth has made substantial progress in defining a national scientific policy and making recommendations to the President on how to implement that policy. Dr. James Rutherford, Chief Education Officer of American Association for the Advancement of Science was formerly the Assistant Director of the National Science Foundation. Dr. Gordon Moore, is Chief Executive Officer and Chairman of INTEL Corporation. Dr. Moore founded INTEL and was co-founder of Fairchild's semi-conductor division.

Threaded through this Country's history of successes and achievements is a commitment to technological innovation—a desire to make things better, to know more about the planet we live on and the universes beyond. We are constantly compared to other industrialized Nations, to Japan, Germany—the Soviet Union. What is sometimes lost in this comparison is that among these other countries, we are barely adolescents—only two hundred and fifty years old. Yet, when these two hundred and fifty years, we have created the technology which has advanced us from horse drawn carriages to reusable space vehicles, from the poney express to satellite communications.

This country is the recognized world leader in science and technology. There are some who say that our position of leadership is threatened, that the Japanese, the Germans and others are moving out in front while we look on. I do not believe that this is our fate. We have always risen to a challenge, and we will do it again.

A recent report by the National Science Foundation, National Priorities of Science and Technology Resources, indicates "The United States spends more money annually on R&D activities than any other Nation and twice the amount spent by the other major Western countries and Japan combined. Relative to the GNP, U.S. R&D expenditures have been equal to those of West Germany since the early seventies, with the United Kingdom and Japan close behind."

PRESIDENT'S BUDGET PROPOSES INCREASE IN RESEARCH AND DEVELOPMENT

The President's fiscal year 1984 budget request represents a solid commitment to research and development. The budget proposes to increase research and development funding by 17 percent above fiscal year 1983 a total of $47 billion. I am particularly pleased with the way that this increase is targeted toward those areas which I believe show the greatest potential. By potential, I mean areas where advancement will have the greatest positive effect on our economy and its long-term strength.

For example, the President proposes to increase funding for the National Science Foundation by 18 percent over fiscal year 1983. The National Science Foundation supports basic research in all fields of science and engineering through grants to colleges and universities and institutions across the country. This basic research forms the foundation for the Country's economic growth and productivity. Because of the uncertainties associated with this type of research, and the relatively long-term "pay-off" the private sector tends to under-invest in this area. It is important to continue to support NSF's efforts. I applaud the Administration's proposal for the Foundation. It indicates a clear understanding of the importance of basic research to the country's future.

Funding for Department of Energy's basic research programs would also increase by 18 percent over fiscal year 1983. This research is conducted primarily at the national scientific laboratories across the country.

The Administration's proposal for NSF, DOE and NASA programs includes a number of new initiatives for fiscal year 1984. For example, NSF would fund activities aimed at recognizing and encouraging talented young scientists and engineers to stay on in universities and continue their valuable research. In addition, the administration proposes several new programs in NSF designed to address the deteriorating quality and quantity of math and science education in secondary schools.

The Department of Energy would initiate construction of the Stanford Linear Collider—designed to demonstrate the feasibility of new high energy physics techniques.

There is direct correlation between research and development activities and economic productivity. Higher productivity and more rapid long-term economic growth are essential to improving our overall budget situation and helping put Americans back to work. We need to find ways to use our limited resources to improve the growth of the Nation's economy.

We are faced with budget deficits large than any ever experienced in our Nation's history. The President's budget forecasts 3.1 percent real growth in 1983 and 4.0 percent real growth in 1984 through 1988. If actual real growth is one percentage point lower than forecast each year, the budget deficit will be $83 billion higher by 1987. If the actual unemployment rate is one percentage point higher than forecast, it will add $37 billion to the deficit by 1987. It is clear that both strong economic growth and lower unemployment are necessary to improve the budget outlook.

EDUCATE OUR WORK FORCE

One of the single most important efforts in improving our Nation's long-term productivity trend is the education of our workforce. I have recently introduced a science and mathematics education bill, which is designed to help halt the declining achievement in these critical areas, serve to encourage teachers who are already in the schools to stay on, and to motivate young people to pursue teaching degrees in these subjects. I believe that it is essential to recognize the problem in math and science education, as part of our overall research and development effort. After all, unless we have technologically literate graduates from our schools, there will be no one to do the research and development.

NASA's new initiatives would include development of a new space science project—the Venus radar mapper. This spacecraft would penetrate the dense clouds surrounding Venus and map the planet, providing us with information not only about the evolution of Venus, but of the Earth as well.

I believe that the Administration's request for basic research and overall R&D represents a strong understanding of the importance of this investment to our country's future. While I might make some changes in individual program recommendations, I fully support the positive thrust of the President's proposal. By increasing funding for basic research, targeting increases toward recognized problem areas, and recommending the commencement of new scientific projects, we will be moving in the right direction. I believe that it is essential that we continue to invest in research and development. I am optimistic that Congress will support the President's efforts in research and development. I look forward to hearing our witnesses' views on science and technology.

Chairman DOMENICI. Senator Chiles, do you have any opening remarks?

OPENING STATEMENT OF SENATOR CHILES

Senator **Chiles**. Mr. Chairman, I want to join with you in welcoming the distinguished panel that we have before us this afternoon and having the chance to explore an area which I think is absolutely vital to our sustained economic growth and to our ability to compete in an increasingly technological world marketplace.

Sometimes on the Budget Committee, we have a case of tunnel vision by focusing so much on the deficits that we lose track of some of the longer range issues, which are just as important to our economic well-being. Certainly, we are working to rectify that this afternoon.

Our country was founded on its pioneer spirit, and yet, with the shrinking of our physical frontiers, we have to be increasingly aware of the need to maintain that spirit, especially as we confront the challenge of international economic competition. It is no longer enough to be strong. We have also got to be smart. And our ability to compete not only in the high-technology area, but in such basic industries as auto and steel, has been increasingly on the results of research and development efforts conducted by our private industry, our universities, and the Federal Government.

The President in his state of the Union address referred to the need for the Federal Government to take the lead, and I am certainly with him on that. There is no place where we can have an active Government role more than in the science area.

I was pleased to see in the President's 1984 budget that the reductions in research and development that marked the first year of the Reagan administration have been turned around. Outlays for total research and development, after dropping $1.4 billion in 1982, will increase by $3.2 billion in 1983 and another $5 billion in 1984, and yet lest we get carried away with the improvement, a closer examination reveals a deeply disturbing trend: Outlays for nonmilitary research and development have dropped steadily since 1981. The President's budget request for 1984 is $5 billion lower than we spent for such research in 1981. In that same period, military research was increased by more than 68 percent, a rise of nearly $12 billion.

BACK RESEARCH WITH MULTIYEAR COMMITMENT

Further, the increase in outlays for the National Science Foundation for 1984, a healthy 16 percent above the 1983 level, yet in future years, the National Science Foundation budget is frozen. The administration may have seen the light, but it appears they are unconvinced of the need for a long-term program. A 1-year spurt in research is of little use unless it is backed by a multiyear commitment.

I am afraid if we are trying to send a signal to universities for private research that they should upgrade and expand their efforts, that this would be the worst way to send it. I do not know why we can expect them to embark on a tremendous new program if the Federal Government appears to have no intention of following through.

So, while I am concerned about where we are placing our priorities in research and in the unsustained commitment to agencies like the National Science Foundation, I think we also need to examine the level of research activities in relation to our GNP. In 1964 to 1967, the Nation's total research and development expenditures as a percent of gross national product fell from 2.9 to 2.2 percent. Since that time, it has grown slightly to about 2.4 percent, yet that growth has been due almost exclusively to non-Federal investments. Since the mid-seventies, the Federal Government's contribution to research and development has been a relatively constant 1.2 percent of GNP, about half of that total. This budget in 1984 would do little to change that.

UNITED STATES RANKS LOW AMONG INTERNATIONAL COMPETITORS

While the total is about the same, the mix is very different. In 1981, the Federal Government spent 0.6 percent of GNP on military research and 0.65 on civilian, and in the fiscal year 1984 budget, the ratio is going to change to more than 2 to 1—0.83 percent for military research and 0.39 percent for the civilian side. Among our chief international competitors, the United States ranks low in terms of total civilian research and development as a portion of our GNP. West Germany spends about 2.2 percent on civilian research, both public and private; Japan, just under 2 percent; the United States spends less than 1.8. Yet these are the very countries with which we must compete most aggressively.

I hope that we can explore these issues with the panel, as well as others, such as targeting Federal research and development funds most effectively and encouraging cooperation among our businesses, our universities, and the Federal Government research program, to improve our fundamental technological capabilities.

I certainly look forward to our panel's presentation.

Chairman **Domenici**. Dr. Keyworth, I understand that you have an early deadline, so we will hear from you first—is it all right with the other two witnesses if we then ask Dr. Keyworth a few questions before we hear your remarks?

Mr. **Moore**. Yes.

Dr. **Rutherford**. Certainly.

Chairman **Domenici**. We will proceed in that manner.

Dr. Keyworth, I personally want to commend you for the work you have done. You certainly have, in terms of both OMB and the President, gotten their ear. I am pleased with the commitment to R&D that is indicated in the budget and look forward to your testimony. In particular, please give special emphasis to the recommended increases and where they will go.

STATEMENT OF DR. GEORGE KEYWORTH II, SCIENCE ADVISER TO THE PRESIDENT, AND DIRECTOR, OFFICE OF SCIENCE AND TECHNOLOGY POLICY, EXECUTIVE OFFICE OF THE PRESIDENT.

Dr. **Keyworth**. Thank you.

Chairman Domenici and members of the committee, I must say I appreciate this chance to appear before this committee to discuss the President's proposed research and development programs and priorities for fiscal year 1984.

Understandably, early public and congressional debate about the Federal budget focused initially on more prominent or more eagerly anticipated provisions. However, I think we would agree that after this early concentration of attention, policymakers will be looking in more depth and with keen interest at the proposed Federal role in R&D. After all, this is one key area of the budget that addresses directly the critical responsibility of building the scientific and technical base for America's future in our relentlessly competitive world.

Mr. Chairman, I look forward to discussing the ways our proposed programs will strengthen our long-term economic and military security. In order to allow as much time as possible for discussion with the committee, with your permission, I would like to submit my formal statement for the record and present a summary of it at this time.

Chairman DOMENICI. It will be made a part of the record,[1] and you may proceed.

Dr. KEYWORTH. Thank you.

Perhaps the strongest reason for my own enthusiasm in presenting an overview of the R&D budget is that, one, it gives me a chance to illustrate how it addresses long-term common needs and goals, and two, that I think these programs will be yet another administration effort that will gain strong bipartisan support from Congress, from the R&D community, and from the public.

During my tenure as Science Adviser—in meeting with individual Members of the Congress, in appearances such as this one before committees, and certainly in discussions with the science community—I have consistently emphasized that the administration would look very hard at how science and technology could help advance national well-being.

GET BEST POSSIBLE RETURN ON INVESTMENTS IN SCIENCE AND TECHNOLOGY

No one disputes the need to maintain and strengthen the health of our science and technology enterprise as a national resource. But we have a graver responsibility. We also have to make sure the Nation gets the best possible return on its Federal investments in science and technology.

Let me describe three criteria embodied in our proposed budget for fiscal year 1984 that guide us toward that end. First, any evaluation of American science and technology today clearly reveals research areas ripe for profound intellectual advances. Much of my office's efforts focus on identifying those opportunities, and they constitute the areas of greatest emphasis in the R&D budget.

Second, the public benefits two ways from R&D. Knowledge is transferred from the lab to society in the form of technological innovations. That means new industries, new jobs, and improvements in our standards of living and quality of life. In fiscal year 1984, we are determined to stimulate greater interaction of academic, Federal, and industrial scientists and engineers and to make sure the best R&D is supported well enough to permit rapid progress.

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[1] See p. 258.

It so happens that we can also derive educational and training advantages from federally supported research. This turns out to be critically important because all of our expectations and opportunities for industrial progress call for a growing supply of skilled technical personnel. That means economic growth to some extent will be paced by the availability of those technical personnel. The most direct way to meet those needs, and the mechanism that affects by far the largest number of people, is through university research, in which graduate students participate. For that reason, as well as others, Federal programs must make sure the academic research community is fairly treated in competition with other research performers.

The third criterion—perhaps a familiar refrain by now—is the appropriateness of the role of the Federal Government in R&D. We have continued to shift the Federal role away from demonstrations of technology and back toward its proper and effective role of basic research and noncommercial development.

R&D POLICY AFFECTS NATIONAL GOALS

Earlier, I said that R&D are tools to help the Nation, so let me review briefly the major national goals that are particularly affected by our R&D policy.

It is clear to see that defense is a major element of the overall R&D budget. I want to emphasize the great reliance the United States places on maintaining a technological advantage over our adversaries rather than trying to match up in terms of troop strength and deployment.

We are now seeing increasing attention to our other major concern: How can Federal investment in leadership in R&D contribute to the Nation's economic progress?

R&D is not offered as some kind of easy answer or as a cureall for all the problems of competitiveness that the U.S. industry must meet, but it can help, and we can use it more effectively than we do. For that reason, a number of our proposed fiscal 1984 initiatives facilitate the interaction between fundamental research and its eventual applications in industry, as well as encourage better interaction; between universities, Federal laboratories, and industry.

Mr. Chairman, the complete budget proposal, as well as the special analysis on research and development, describes the administration's fiscal 1984 policy priorities in the next fiscal year. Those priorities show up in three ways. Defense R&D, stretched thin for nearly 20 years, is once again being addressed. This includes more than $850 million for basic or fundamental research. Basic research in the physical sciences and engineering, underfunded since the midsixties, will receive large selective increases. Much of the increased basic research will be directed to our universities, where it will also help train new scientists and engineers, who are of course the key elements in maintaining our scientific and technological leadership.

The return on our R&D investment will be measured in the future as improved competitiveness of our industries, improved balance of trade, and creation of new jobs for American workers.

Now, please understand that we are not proposing a general infusion of Federal funds into R&D. This selective growth responds to intellectual opportunity and long term relevance to national needs. It is decidedly not science for science's sake; our intent is not to simply beef up a field by increasing the number of projects. Instead, we expect to concentrate on the very best projects we can identify and to provide enough funding to permit them to grow into world-leading concentrations of research excellence.

LARGE INCREASES FOR NATIONAL SCIENCE FOUNDATION PROPOSED

For example, we are proposing large increases for many of the National Science Foundation programs for the coming year. These reflect both research opportunities and the mission of NSF, which is to support basic research in the Nation's universities, which require very special attention. Notwithstanding the Federal investment in basic research over the past 20 years, our academic institutions have suffered, at least in the areas of physical science and engineering, partly because an inordinate share of that support has gone to other institutions, particularly Federal laboratories.

With few exceptions, universities have become less attractive places to pursue research careers in those fields. Inadequate equipment and instrumentation are limiting the quality of both research and education. Salaries for young faculty are so low that many new Ph. D.'s do not seriously consider what, not many years ago, would have been their preferred career choices. In addition, much of the best university research is not funded well enough to take full advantage of its potential. I will repeat what I have said time and time again—somehow, we have arrived at the indefensible position of creating the poorest climate for research in the very place that ought to have the best.

That has to be changed, both to protect the world-leading basic research capability we have built up over three decades, and to make sure the universities can uphold the high standards for education that we have come to rely on from them.

This academic problem accounts to an important extent for our emphasis on Federal funding of research through the National Science Foundation and other university-oriented programs. For example, in fiscal vear 1984, NSF basic research grants will support aporoximately 10,400 graduate students, who will then be available for the large S&T industrial personnel needs projected for the end of the decade and beyond.

SUPPLY OF TEACHERS INADEQUATE

We have also been consulting with many groups about other problems of science and engineering education. The most serious problem was readily agreed upon: The inadequate supply of new, junior engineering and science faculty in universities and the shortage of qualified secondary school science and math teachers.

The fiscal 1984 budget contains several specific new programs that address these problems. The Presidential young investigator awards program to be administered by NSF will attract some of those recent Ph. D.'s to university research who now go into nonteaching careers in industry, and several new programs will improve the supply of qualified science and math teachers in secondary schools.

I am sure this committee will be glad to know the costs for these education programs will not be great, but by concentrating resources strictly where they are most needed, on good faculty, we anticipate substantial, long term benefits.

Fiscal year 1984 also is the time for major impact on another university research problem—outmoded and obsolete research equipment and instrumentation. In all, the proposed level of basic research funding will include nearly $400 million for purchase and replacement of instrumentation.

Mr. Chairman, the comparisons between basic research in fiscal years 1983 and 1984 are dominated by two factors: large increases in the physical sciences and engineering—about 15 percent—and an increase of about 3 percent for the life sciences. As you know, the life sciences are a very productive and a very rich area of research, and they have experienced a high growth rate since the midsixties. In light of the substantial resources already committed to the life sciences over a period of many years, we believe the most promising research in those fields will continue to be well supported.

We now have to concentrate on those areas in the physical sciences and engineering that have been neglected, yet which promise great return to our foremost national priorities: Industrial advances to fuel our economy and defense.

Fiscal year 1984 can be a pivotal year for Federal programs in R&D. We are proposing an array of science and technology programs that address critical needs in our society. The administration is anxious to join with the Congress in setting the country on a productive course to make the best possible use of the resources and potential of our universities, our Federal laboratories, and our industrial enterprise.

Mr. Chairman, this concludes my presentation, and I would be happy to respond to questions from members of the committee.

Chairman DOMENICI. Thank you, Mr. Keyworth.

PROPOSED TESTIMONY OF DR. GEORGE A. KEYWORTH, II
SCIENCE ADVISOR TO THE PRESIDENT, AND
DIRECTOR, OFFICE OF SCIENCE AND TECHNOLOGY POLICY,
EXECUTIVE OFFICE OF THE PRESIDENT

TO THE COMMITTEE ON BUDGET
UNITED STATES SENATE

HEARING ON
BUDGET ISSUES IN THE FIELD OF SCIENCE AND TECHNOLOGY

FEBRUARY 18, 1983

Chairman Domenici and Members of the Committee:

I appreciate this chance to appear before this Committee to discuss the President's proposed research and development programs and priorities for fiscal year 1984. Understandably, early public and Congressional debate about the federal budget focused initially on more prominent or more eagerly anticipated provisions. However, I think we would agree that after this early concentration of attention, policymakers will be looking in more depth and with keen interest at the proposed federal role in R&D. After all, this is one key area of the budget that addresses directly the critical responsibility of building the scientific and technical base for America's future in our relentlessly competitive world.

Perhaps the strongest reason for my own enthusiasm in presenting an overview of the R&D budget is that, one, it gives me a chance to illustrate how it addresses long-term common needs and goals, and, two, that I think these programs will be yet another Administration effort that will gain strong bipartisan support from Congress, from the R&D community, and from the public.

Before discussing the R&D budget itself, I would like to review the principles that, first, guide our decisions about how Federal science and technology will be conducted, and, second, guide our specific proposals for levels of Federal support. It is these broad policy principles that have guided the development of our FY 1984 R&D budget.

Mr. Chairman, during my tenure as Science Advisor--in meeting with individual Members of the Congress, in appearances such as this one before Committees, and certainly in discussions with the science community--I have consistently emphasized that the Administration would look very hard at how science and technology could help advance national well-being. This differed somewhat from the traditional approach to S&T policy--which placed primary emphasis on ensuring the general health and vitality of science and its institutions. We are, OF COURSE, THE BENEFICIARIES OF THOSE MANY YEARS OF SUPPORT AND BUILDUP OF S&T INSTITUTIONS. AND I'M CONVINCED THAT AMERICAN S&T IS STILL, OVERALL, BY FAR THE WORLD'S BEST. BY ALMOST ANY MEASURE--NUMBER OF SCIENTISTS, QUALITY OF UNIVERSITY PROGRAMS, NOBEL PRIZES, AMOUNT OF MONEY INVESTED--WE SURPASS ANY OTHER NATION. WE HAVE TREMENDOUS TOOLS AND RESOURCES AVAILABLE, AND OUR TECHNICAL COMMUNITY IS CAPABLE OF MOMENTOUS ACHIEVEMENTS.

NO ONE DISPUTES THE NEED TO MAINTAIN AND STRENGTHEN THE HEALTH OF OUR S&T ENTERPRISE AS A NATIONAL RESOURCE. BUT THAT, IN ITSELF, WOULD BE INADEQUATE POLICY GUIDANCE TO MEET THE GROWING--AND MUCH DISCUSSED--TECHNOLOGICAL CHALLENGES FROM FOREIGN INDUSTRIAL AND MILITARY COMPETITORS.

POLICIES THAT SERVED THE NATION WELL DURING DECADES OF RELATIVE ECONOMIC AFFLUENCE AND OVERWHELMING AMERICAN TECHNOLOGICAL SUPERIORITY OVER OTHER NATIONS MUST BE MODIFIED TO DEAL WITH TODAY'S HARSHER CONDITIONS. WE HAVE A GRAVER RESPONSIBILITY TO MAKE SURE THE NATION GETS THE BEST POSSIBLE RETURN ON ITS FEDERAL INVESTMENTS IN SCIENCE AND TECHNOLOGY.

WE'VE EMPLOYED THREE DISTINCT CRITERIA IN PUTTING TOGETHER OUR PROPOSED PROGRAMS FOR FY 1984. BY APPLYING THOSE THREE CRITERIA--AND BY RESISTING THE TEMPTATION

TO DIVERT SCARCE RESOURCES TO QUICK-FIXES OF SHORT TERM PROBLEMS--WE'RE CONFIDENT WE'VE ESTABLISHED PRIORITIES THAT ADDRESS U.S. NEEDS FOR MANY YEARS TO COME.

EXAMINATIONS OF AMERICAN SCIENCE AND TECHNOLOGY TODAY CLEARLY REVEAL RESEARCH AREAS RIPE FOR PROFOUND INTELLECTUAL ADVANCES, VIRTUALLY BURSTING WITH EXCELLENT IDEAS AND PEOPLE. MUCH OF MY OFFICE'S EFFORTS FOCUS ON IDENTIFYING THOSE OPPORTUNITIES--AND THEY CONSTITUTE THE AREAS OF GREATEST GROWTH IN THE R&D BUDGET. AND THESE PRIORITIES DO REFLECT BROAD AND INFORMED CONSENSUS OF THE S&T COMMUNITY. THAT INCLUDES THE SCIENCE AGENCIES, THE WHITE HOUSE SCIENCE COUNCIL AND THE NATIONAL ACADEMY OF SCIENCES, AND REPRESENTATIVES OF THE NATION'S SCIENCE AND TECHNOLOGY ORGANIZATIONS. SO THAT FIRST CRITERION--OPPORTUNITY FOR SCIENTIFIC ADVANCE--GUIDES THE SELECTIONS OF AREAS FOR FASTEST GROWTH.

HOW ELSE DO WE ASSURE THE BEST RETURN ON OUR INVESTMENT? HERE WE'RE TALKING ABOUT PERTINENCE, AND WE HAVE TO REMEMBER THAT BASIC RESEARCH DOESN'T EXIST IN A VACUUM. SOCIETY--THAT IS THE PEOPLE PAYING THE BILLS FOR FEDERAL PROGRAMS--BENEFITS IN TWO WAYS FROM R&D. KNOWLEDGE IS TRANSFERRED FROM THE LAB TO SOCIETY IN THE FORM OF TECHNOLOGICAL INNOVATIONS. THAT MEANS NEW INDUSTRIES, NEW JOBS, AND IMPROVEMENTS IN OUR STANDARDS OF LIVING AND QUALITY OF LIFE.

WE ALL KNOW THAT TRANSFER OF KNOWLEDGE IS A MYSTERIOUS PROCESS, DIFFICULT TO PREDICT AND RESISTANT TO MANIPULATION. WHILE WE RECOGNIZE THAT IT'S UNWISE TO TAMPER WITH MECHANISMS WE DON'T UNDERSTAND, WE CAN AT LEAST FOCUS ON IMPROVING THE CLIMATE THAT PERMITS TRANSFER OF KNOWLEDGE TO OCCUR. THAT MEANS STIMULATING GREATER INTERACTION OF ACADEMIC, FEDERAL, AND INDUSTRIAL SCIENTISTS AND ENGINEERS, AND MAKING SURE THE BEST R&D IS SUPPORTED WELL ENOUGH TO PERMIT RAPID PROGRESS.

IT SO HAPPENS THAT WE CAN ALSO DERIVE EDUCATIONAL AND TRAINING ADVANTAGES FROM FEDERALLY SUPPORTED RESEARCH. THIS TURNS OUT TO BE CRITICALLY IMPORTANT BECAUSE ALL OF OUR EXPECTATIONS AND OPPORTUNITIES FOR INDUSTRIAL PROGRESS CALL FOR A GROWING SUPPLY OF SKILLED TECHNICAL PERSONNEL. THAT MEANS ECONOMIC GROWTH TO SOME EXTENT WILL BE PACED BY THE AVAILABILITY OF THOSE TECHNICAL PERSONNEL. THE MOST DIRECT WAY TO MEET THOSE NEEDS, AND THE MECHANISMS THAT AFFECTS BY FAR THE LARGEST NUMBER OF PEOPLE, IS THROUGH UNIVERSITY RESEARCH, WHICH IS SYNONYMOUS WITH THE PRODUCTION OF SCIENTIFIC AND TECHNICAL PERSONNEL. THE OPPORTUNITY FOR GRADUATE STUDENTS TO BECOME MEMBERS OF THE RESEARCH COMMUNITY AS PARTNERS IN FACULTY RESEARCH PROJECTS IS OFTEN THE MOST IMPORTANT PRODUCT OF A RESEARCH GRANT.

FOR THAT REASON, AS WELL AS OTHERS, FEDERAL PROGRAMS MUST ONCE AGAIN EMPHASIZE THIS DUAL BENEFIT FROM UNIVERSITY RESEARCH AND MAKE SURE THE ACADEMIC RESEARCH COMMUNITY IS FAIRLY TREATED IN COMPETITION WITH OTHER RESEARCH PERFORMERS.

THE THIRD CRITERION, PERHAPS A FAMILIAR REFRAIN BY NOW, IS THE APPROPRIATENESS OF THE ROLE OF THE FEDERAL GOVERNMENT IN R&D. WITH EACH SUCCEEDING YEAR WE HAVE TRIED TO DISTINGUISH MORE CLEARLY BETWEEN FEDERAL AND PRIVATE SECTOR RESPONSIBILITIES.

I WANT TO EMPHASIZE THAT THIS MISSION IS NOT BORN OF IDEOLOGY, BUT PRACTICALITY. THE PRIVATE SECTOR, WHICH OPERATES IN THE MARKETPLACE, IS FAR MORE SUCCESSFUL THAN THE GOVERNMENT IN UNDERTAKING COMMERCIALLY ORIENTED, SHORT-TERM TECHNOLOGY PROGRAMS. THE MOST RECENT ISSUE OF "SCIENCE" (18 FEBRUARY 1983) CONTAINS AN ARTICLE BY PROFESSOR NELSON OF YALE UNIVERSITY, WHICH DRAWS THIS SAME CONCLUSION VERY STRONGLY FROM AN HISTORICAL ANALYSIS OF U.S. INDUSTRIAL INNOVATION POLICY. SO WE'VE CONTINUED TO SHIFT THE FEDERAL ROLE AWAY FROM DEMONSTRATIONS OF TECHNOLOGY AND BACK TOWARDS ITS PROPER AND EFFECTIVE ROLE OF BASIC RESEARCH AND NON-COMMERCIAL DEVELOPMENT.

EARLIER I SAID THAT R&D ARE TOOLS TO HELP THE NATION. SO LET ME REVIEW, BRIEFLY, THE MAJOR NATIONAL GOALS THAT ARE PARTICULARLY AFFECTED BY OUR R&D POLICY.

IT'S CLEAR TO SEE THAT DEFENSE IS A MAJOR ELEMENT OF THE OVERALL R&D BUDGET. I WANT TO EMPHASIZE THE GREAT RELIANCE THE UNITED STATES PLACES ON MAINTAINING A TECHNOLOGICAL ADVANTAGE OVER OUR ADVERSARIES--RATHER THAN TRYING TO MATCH UP IN TERMS OF TROOP STRENGTH AND DEPLOYMENT. UNFORTUNATELY, OVER A PERIOD OF TWENTY YEARS WE HAVE CONSISTENTLY UNDERINVESTED IN DEFENSE R&D--IN EFFECT COASTING ON THE ADVANTAGE WE HELD MANY YEARS AGO. THAT NEGLECT HAS CAUGHT UP WITH US AND TRULY THREATENS THE BASIS OF OUR SECURITY.

THAT BALD REALITY IS THE REASON FOR THIS ADMINISTRATION'S EMPHASIS ON DEFENSE R&D IN PREVIOUS BUDGETS AND IN THIS ONE AS WELL. EVEN SO, WE'RE INVESTING A FAR SMALLER PORTION OF OUR RESOURCES IN DEFENSE TODAY THAN WE DID TWENTY YEARS AGO.

WE'RE NOW SEEING INCREASING ATTENTION TO OUR OTHER MAJOR CONCERN: HOW CAN FEDERAL INVESTMENT AND LEADERSHIP IN R&D CONTRIBUTE TO THE NATION'S ECONOMIC PROGRESS? THIS ISN'T A NEW ISSUE, BUT IT'S BECOME SPOTLIGHTED IN

THE PAST FEW YEARS BECAUSE OF THE RISE IN TECHNOLOGICAL AND INDUSTRIAL COMPETENCE AND ASPIRATIONS OF MANY OTHER NATIONS. WE'RE SEEING NOW, AS IF WITH NEW EYES, THAT FOR A HIGHLY TECHNOLOGICAL INDUSTRIAL SOCIETY LIKE OURS, SLUGGISH TRANSFER OF NEW KNOWLEDGE AND EXPLOITATION OF NEW TECHNOLOGY CAN HAVE PROFOUND, TRAGIC IMPACTS ON MATURE INDUSTRIES.

R&D ISN'T OFFERED AS SOME KIND OF EASY ANSWER, OR AS A CURE-ALL FOR THE PROBLEMS OF COMPETITIVENESS THAT U.S. INDUSTRY MUST MEET. BUT I THINK WE ALL SHARE THE BELIEF THAT IT CAN HELP AND THAT WE MUST USE IT AS EFFECTIVELY AS WE CAN. MOREOVER, R&D IS THE ESSENTIAL SOURCE OF KNOWLEDGE FOR NEW INDUSTRIES--AND, EVENTUALLY, NEW JOBS. AS A NATION WE'RE COMMITTED TO GROWTH THROUGH NEW TECHNOLOGY; THAT IS OUR FUTURE. SO WE'RE CONFRONTED WITH THE CHALLENGE OF USING FEDERAL R&D PROGRAMS TO ACHIEVE MAXIMUM IMPACT ON OUR DESTINY. FOR THAT REASON A NUMBER OF OUR PROPOSED FY 1984 INITIATIVES ARE DESIGNED TO FACILITATE THE INTERACTION BETWEEN FUNDAMENTAL RESEARCH AND ITS EVENTUAL APPLICATIONS IN INDUSTRY.

WE'RE ALSO ENCOURAGING, THOUGH NOT NECESSARILY AS PART OF THE BUDGET, BETTER INTERACTIONS BETWEEN UNIVERSITIES, FEDERAL LABORATORIES, AND INDUSTRY. I'LL GIVE AN EXAMPLE A BIT LATER, BUT LET ME ADD THAT I'VE OBSERVED STRONG, NEW

INTEREST FROM MANY INDUSTRIES AND UNIVERSITIES IN GETTING TO KNOW EACH OTHER BETTER AND IN TRYING TO SEE HOW THEY CAN HELP EACH OTHER ACHIEVE THEIR GOALS. I ATTRIBUTE THIS HEALTHY DEVELOPMENT PRIMARILY TO A NEW--AND I CERTAINLY HOPE LASTING--REALIZATION OF THE NEED TO IMPROVE OUR DOMESTIC CLIMATE FOR TRANSLATING RESEARCH INTO NEW TECHNOLOGIES.

BEFORE DISCUSSING SPECIFICS OF THE FY 1984 R&D PROGRAMS, I'D LIKE TO HIGHLIGHT SEVERAL OSTP ACTIONS DURING THE PAST YEAR THAT HAVE IMPORTANT POLICY RAMIFICATIONS.

I'LL ONLY MENTION IN PASSING THE ADMINISTRATION'S NEW SPACE POLICY. WE ARE DETERMINED TO TAKE ADVANTAGE OF THE SUPERB CAPABILITIES OF THE SPACE SHUTTLE FOR A NEW GENERATION OF RESEARCH AND APPLICATIONS IN SPACE. WE'VE ALL TAKEN GREAT PRIDE IN THE CONTINUED SUCCESS OF THE SHUTTLE PROGRAM, INCLUDING THE FIRST LAUNCH OF COMMERCIAL PAYLOADS IN 1982. THIS YEAR WE EXPAND THE OPERATIONAL FLEET TO TWO ORBITERS, AND WE INTEND TO PROVIDE THE NECESSARY FUNDING TO ENSURE THE FUTURE OPERATION OF A FOUR-ORBITER FLEET--WHICH IS ADEQUATE TO MEET CURRENT PROJECTED DEMANDS FOR LAUNCH CAPACITY.

OVER THE NEXT FEW YEARS THE SHUTTLE, AND ITS HIGH-ENERGY UPPER STAGE, WILL BE THE CENTERPIECE OF A VARIETY OF TRULY EXCITING NEW SCIENTIFIC SATELLITES. MANY OF THOSE HAVE BEEN UNDER DEVELOPMENT FOR SEVERAL YEARS

NOW, SUCH AS THE SPACE TELESCOPE OR THE GALILEO JUPITER SPACECRAFT. BUT I WANT TO CALL YOUR ATTENTION TO OUR PROPOSED VENUS RADAR MAPPER AS AN EXAMPLE OF HOW NASA, DRAWING ON ITS EXPERIENCE AND SUCCESSES, HAS BEEN ABLE TO REDUCE THE COMPLEXITY AND COSTS OF PLANETARY PROGRAMS AND STILL ACHIEVE MAJOR SCIENTIFIC OBJECTIVES.

LATE IN 1982 WE ALSO COMPLETED OUR REVIEW OF THE FEDERAL ROLE IN AERONAUTICS RESEARCH AND TECHNOLOGY. YOU'LL SEE THAT AERO POLICY IMPLEMENTED IN BOTH THE NASA AND DEFENSE R&D PROGRAMS FOR FY 1984.

MR. CHAIRMAN, I'M VERY PROUD OF THE ABILITIES AND ACCOMPLISHMENTS OF MY STAFF AND OF THE MANY PEOPLE FROM OTHER FEDERAL ORGANIZATIONS WHO HAVE CONTRIBUTED SO MUCH TO STUDIES LIKE THE TWO I JUST MENTIONED. BUT I'M ALSO DELIGHTED TO POINT TO THE ACHIEVEMENTS OF THE WHITE HOUSE SCIENCE COUNCIL, A GROUP OF 13 DISTINGUISHED ACADEMIC AND INDUSTRIAL SCIENTISTS WHOSE INVESTIGATIONS AND ADVICE HAVE PROVEN TO BE INVALUABLE TO ME.

ONE PARTICULAR WHSC STUDY--A THOROUGH REVIEW OF OUR FEDERAL LABORATORIES--IS NOW NEARLY COMPLETE. ALTHOUGH I WON'T PRESUME TO ANTICIPATE THE PANEL'S FINAL CONCLUSIONS, OUR INTERACTIONS SO FAR SUGGEST TO ME THAT THEY'RE FINDING SEVERAL IMPORTANT AREAS IN WHICH THE LABS CAN PROVIDE

EVEN GREATER SERVICE TO THE NATION. INDICATIONS ARE THAT THIS RESOURCE, WHICH CLAIMS ABOUT ONE-THIRD OF THE ENTIRE FEDERAL R&D BUDGET, CAN CONTRIBUTE SUBSTANTIALLY TO OUR NATIONAL NEEDS IN DEFENSE AND CIVILIAN TECHNOLOGY-- AND THAT WE SHOULD FIND BETTER WAYS TO MAKE THAT HAPPEN.

IN ADDITION TO OUR EMPHASIS ON GROWTH IN UNIVERSITY RESEARCH TO STRENGTHEN THE KNOWLEDGE AND PERSONNEL FOUNDATION FOR FUTURE INDUSTRIAL NEEDS, THE ADMINISTRATION HAS CONTINUED TO PURSUE OTHER, NON-BUDGETARY ACTIONS AS PART OF ITS POLICIES TO IMPROVE THE CLIMATE FOR PROGRESS IN INDUSTRIAL TECHNOLOGY. WE'VE FOCUSED EFFORTS IN THE PAST YEAR IN THREE ADDITIONAL AREAS.

THE PATENT OFFICE, UNDER THE ABLE HAND OF COMMISSIONER MOSSINGHOFF, HAS EMBARKED ON A PLAN TO COMPUTERIZE ITS OPERATIONS; THAT WILL SIGNIFICANTLY REDUCE THE TIME INVOLVED IN PATENT PROCESSING. IN THE PAST YEAR THE CONGRESS HAS ALSO MADE IMPORTANT CONTRIBUTIONS IN THE PASSAGE OF LEGISLATION THAT FACILITATES VOLUNTARY ARBITRATION OF PATENT DISPUTES.

THE ADMINISTRATION BELIEVES TRADITIONAL ANTI-TRUST POLICY HAS BEEN UNNECESSARILY RESTRICTIVE IN PREVENTING INDUSTRIES FROM POOLING RESOURCES FOR R&D. GUIDELINES ARE IN PREPARATION THAT WILL PERMIT GREATER INDUSTRIAL

PARTICIPATION IN LONG-TERM, HIGH-RISK RESEARCH. THIS IS ANOTHER EXAMPLE OF TRYING TO ENCOURAGE INSTITUTIONS TO BROADEN THEIR R&D, TO TAP INTO THAT RICH POTENTIAL THAT LIES BETWEEN SECTORS.

THE THIRD AREA CONCERNS REGULATION. IT'S NO SECRET THAT THE ADMINISTRATION BELIEVES THAT, IN GENERAL, GOVERNMENT IMPOSES UNNECESSARY AND EXPENSIVE BURDENS ON BOTH INDIVIDUALS AND INSTITUTIONS. MY OFFICE HAS BEEN LOOKING SPECIFICALLY AT REGULATIONS DEALING WITH ENVIRONMENTAL AND HUMAN SAFETY, WHICH ARE OSTENSIBLY BASED ON TECHNICAL CONSIDERATIONS--THAT IS, SOME CONCEPT OF DETECTABLE RISKS AND HAZARDS.

THIS YEAR WE HAVE BEGUN THE DIFFICULT TASK OF MAKING AN ASSESSMENT OF CURRENT SCIENTIFIC KNOWLEDGE ABOUT HUMAN CARCINOGENS. OUR GOAL IS TO THEN DEVELOP POLICY GUIDELINES THAT WILL IMPROVE THE SCIENTIFIC BASIS FOR CARCINOGEN REGULATIONS THAT IMPACT WIDELY ON INDUSTRY, GOVERNMENT, AND EVERY ONE OF US. NEEDLESS TO SAY, THIS IS PROVING TO BE A CHALLENGE, BUT WE SEE THIS PROCESS AS A MODEL FOR DOING SIMILAR UPDATES IN OTHER AREAS OF REGULATION.

LET ME MENTION ONE OTHER AREA OF ACTIVITY BEFORE I DISCUSS THE PROPOSED FY 1984 PROGRAMS. OSTP HAS LED ADMINISTRATION EFFORTS TO EXPLORE OPPORTUNITIES FOR SHARING

SOME OF THE COSTS AND RESOURCES FOR RESEARCH WITH OTHER NATIONS WHO ARE WORKING ALONG PARALLEL TRACKS. IN THE PAST YEAR, AS A CONSEQUENCE OF THE JULY 1982 VERSAILLES SUMMIT, WE'VE BEEN HOLDING DISCUSSIONS WITH WESTERN EUROPEAN NATIONS AND JAPAN ON SHARED RESEARCH IN SUCH AREAS AS FUSION, HIGH-ENERGY PHYSICS FACILITIES, AND PLANETARY EXPLORATION. OSTP IS ALSO DIRECTING THE EFFORT TO ESTABLISH GREATER COOPERATION WITH INDIA IN RESEARCH ON FOOD PRODUCTION, HEALTH, BIOMASS FOR ENERGY, AND MATERIALS SCIENCES. THIS EFFORT GREW OUT OF DISCUSSIONS BETWEEN PRESIDENT REAGAN AND PRIME MINISTER GANDHI DURING HER U.S. VISIT LAST JULY. WE ALSO CONTINUE TO WORK TOWARD EXPANDED SCIENTIFIC INTERACTION WITH THE PEOPLE'S REPUBLIC OF CHINA.

MR. CHAIRMAN, THE COMPLETE BUDGET PROPOSAL, AS WELL AS THE SPECIAL ANALYSIS ON RESEARCH AND DEVELOPMENT, DESCRIBES HOW THE ADMINISTRATION IS IMPLEMENTING ITS POLICY PRIORITIES IN THE NEXT FISCAL YEAR. I'M SURE THAT THE COMMITTEE, IN STUDYING THOSE PROPOSALS OVER THE COMING MONTHS, WILL PARTICULARLY SCRUTINIZE THE SUBSTANTIAL GROWTH WE'RE PROPOSING IN MANY AREAS OF R&D. IN LIGHT OF THE CURRENT ECONOMIC CRISIS, AND THE NEED TO REDUCE THE FEDERAL DEFICIT, YOU'LL WANT TO ASSURE YOURSELVES THAT THESE INCREASES ARE NECESSARY AT THIS CRITICAL TIME. I THINK THE TESTS OF THEIR NECESSITY ARE SIMPLE ONES: WHAT IMPACT WILL THOSE

INCREASES HAVE ON THE NATION'S LONG-TERM ECONOMIC REVITALIZATION? WILL THEY TRULY IMPROVE THE ABILITY--AND CLIMATE--FOR S&T INSTITUTIONS AND PERSONNEL TO CONTRIBUTE TO OUR NATION'S LONG-TERM ECONOMIC REVITALIZATION?

OUR ANSWER IS THAT WE'RE CONVINCED THAT THOSE AREAS OF R&D PROJECTED FOR GROWTH WILL MAKE IMPORTANT CONTRIBUTIONS TO AMERICA'S TECHNOLOGICAL LEADERSHIP IN COMING YEARS. THE RETURN ON THIS INVESTMENT WILL BE MEASURED IN FUTURE IMPROVED COMPETITIVENESS OF OUR INDUSTRIES, IMPROVED BALANCE OF TRADE, AND CREATION OF NEW JOBS FOR AMERICAN WORKERS.

PLEASE UNDERSTAND, WE'RE NOT PROPOSING A GENERAL INFUSION OF FEDERAL FUNDS INTO R&D, EVEN THOUGH MANY AREAS HAVE BEEN CONSISTENTLY UNDERFUNDED OVER THE PAST DECADE. NO, THE GROWTH IS SELECTIVE. IT RESPONDS TO INTELLECTUAL OPPORTUNITY AND LONG-TERM RELEVANCE TO INDUSTRIAL NEEDS. IT'S DECIDEDLY NOT SCIENCE FOR SCIENCE'S SAKE. MOREOVER, EVEN IN THOSE TARGET AREAS OF HIGH OPPORTUNITY, OUR INTENT IS NOT TO SIMPLY BEEF UP A FIELD BY INCREASING THE NUMBER OF PROJECTS--BY FUNDING THE NEXT-BEST 10 OR 15 PERCENT OF THE PROJECTS THAT HAD TO BE TURNED DOWN IN PREVIOUS LEAN YEARS. INSTEAD WE EXPECT TO CONCENTRATE ON THE VERY BEST PROJECTS WE CAN IDENTIFY--AND TO PROVIDE ENOUGH FUNDING

TO PERMIT THEM TO GROW INTO WORLD-LEADING CONCENTRATIONS OF RESEARCH EXCELLENCE. THIS APPROACH WILL NOT NECESSARILY BE POPULAR WITH THE BROAD R&D COMMUNITY, WHICH MAY EXPECT THIS GROWTH IN R&D TO BE A RESPONSE TO CONSTRAINED FUNDING OVER THE YEARS. BUT OUR RESPONSIBILITIES ARE GRAVE THESE DAYS, AND WE HAVE TO CHANNEL RESOURCES TO THOSE PLACES WHERE WE THINK THEY'LL HAVE THE GREATEST IMPACT.

LET ME ILLUSTRATE THIS APPROACH WITH A COUPLE OF EXAMPLES.

NEW TECHNOLOGY IS INCREASINGLY BEING BUILT ON ADVANCES IN MATERIALS--FINELY TOOLED SEMICONDUCTORS FOR MICROELECTRONICS, NEW ALLOYS AND CERAMICS FOR HIGH PERFORMANCE ENERGY CONVERSION, POLYMERS AS REPLACEMENTS FOR STRUCTURAL METALS. WE'RE ENTERING AN ERA IN WHICH WE'LL NOT ONLY SHIFT AWAY FROM RELIANCE ON INCREASINGLY SCARCE NATURAL MATERIALS, BUT IN WHICH WE CAN PROCESS COMMON RAW MATERIALS INTO EXOTIC NEW COMPOUNDS WITH ASTOUNDING PERFORMANCE. TOMORROW'S HIGH-TECHNOLOGY MARKETPLACE WILL BE INFUSED WITH THOSE NEW MATERIALS.

WE SEE AN EXCITING POSSIBILITY HERE TO CAPITALIZE ON AMERICAN EXPERTISE WITH THE DEVELOPMENT OF A NATIONAL ADVANCED MATERIALS RESEARCH CENTER AT LAWRENCE BERKELEY

LABORATORY. LBL, WHICH IS A SUPERB DEPARTMENT OF ENERGY LABORATORY LOCATED AT THE UNIVERSITY OF CALIFORNIA, HAS RECOGNIZED THREE THINGS. FIRST, SCIENCE HAS MADE ENOUGH PROGRESS IN RECENT YEARS TO BRING A VARIETY OF DISCIPLINES TO A NEW THRESHOLD IN UNDERSTANDING MATERIALS. SECOND, THE POTENTIAL APPLICATIONS OF THIS KNOWLEDGE, AS IT'S DEVELOPED, WOULD SPREAD THROUGHOUT OUR HIGH-TECHNOLOGY INDUSTRIES. AND THIRD, THIS IS AN AREA OF BASIC SCIENCE IN WHICH THE UNITED STATES NOW HOLDS A DECISIVE WORLD LEAD THAT CAN BE BROADLY EXTENDED.

ALTHOUGH THE INITIAL FUNDING FOR THIS CENTER WILL BE LARGELY FEDERAL, WE ALREADY KNOW OF WIDE INDUSTRIAL INTEREST IN WORKING WITH LBL AS THE CENTER DEVELOPS. WE SEE THIS FACILITY AS A CRUCIBLE FOR ESTABLISHING NEW MEANS OF UNIVERSITY/ FEDERAL LABORATORY/INDUSTRY INTERACTION AND COOPERATION. WE'RE VERY ENTHUSED AT THE PROSPECTS FOR SUCCESS AT LBL.

IN ANOTHER AREA, YOU'LL NOTICE THAT WE'RE PROPOSING HEALTHY INCREASES IN MANY OF THE NATIONAL SCIENCE FOUNDATION PROGRAMS FOR THE COMING YEAR. THESE REFLECT BOTH THE RESEARCH OPPORTUNITIES I'VE ALREADY DISCUSSED, AND ALSO THE MISSION OF NSF, WHICH IS TO SUPPORT BASIC RESEARCH IN THE NATION'S UNIVERSITIES--WHICH REQUIRE SPECIAL ATTENTION.

NOTWITHSTANDING THE FEDERAL INVESTMENT IN BASIC RESEARCH OVER THE PAST TWENTY YEARS, OUR ACADEMIC INSTITUTIONS HAVE SUFFERED--AT LEAST IN THE AREAS OF PHYSICAL SCIENCES AND ENGINEERING--PARTLY BECAUSE AN INORDINATE SHARE OF THAT SUPPORT HAS GONE TO OTHER INSTITUTIONS, PARTICULARLY FEDERAL LABORATORIES. WITH FEW EXCEPTIONS UNIVERSITIES HAVE BECOME LESS AND LESS ATTRACTIVE PLACES TO PURSUE RESEARCH CAREERS IN THOSE FIELDS. INADEQUATE EQUIPMENT AND INSTRUMENTATION ARE LIMITING THE QUALITY OF BOTH RESEARCH AND EDUCATION. SALARIES FOR YOUNG FACULTY ARE SO LOW THAT MANY OF THE BRIGHTEST NEW RESEARCHERS NO LONGER SERIOUSLY CONSIDER WHAT, NOT MANY YEARS AGO, WOULD HAVE BEEN THEIR PREFERRED CAREER CHOICES. WHEN I HEAR THE PRESIDENT OF MIT COMPLAINING THAT HE CAN'T FIND QUALIFIED APPLICANTS FOR SOME ENGINEERING FACULTY POSITIONS, I KNOW WE ALL HAVE A PROBLEM.

IN ADDITION, MUCH OF THE BEST UNIVERSITY RESEARCH ISN'T FUNDED WELL ENOUGH TO TAKE FULL ADVANTAGE OF THEIR POTENTIAL. I'LL REPEAT WHAT I'VE SAID TIME AND TIME AGAIN: SOMEHOW WE'VE ARRIVED AT THE INDEFENSIBLE POSITION OF CREATING THE POOREST CLIMATE FOR RESEARCH IN THE PLACE THAT OUGHT TO HAVE THE BEST. THAT HAS TO BE CHANGED, BOTH TO PROTECT THE WORLD-LEADING BASIC

RESEARCH CAPABILITY WE'VE BUILT UP OVER THREE DECADES--AND TO MAKE SURE THE UNIVERSITIES CAN UPHOLD THE HIGH STANDARDS FOR EDUCATION THAT WE'VE COME TO RELY ON FROM THEM.

THIS ACADEMIC PROBLEM UNDERLIES THE FUTURE OF OUR WHOLE CIVILIAN AND DEFENSE R&D CAPABILITIES. WE CAN'T LOSE SIGHT OF THE SINGLE MOST ESSENTIAL INVESTMENT FOR OUR FUTURE--THE EDUCATION OF TODAY'S YOUTH TO BECOME TOMORROW'S TALENT. BY FAR THE MOST IMPORTANT PART OF THAT TRAINING TAKES PLACE BY PARTICIPATION IN UNIVERSITY BASIC RESEARCH, AS GRADUATE STUDENTS PROGRESS FROM NOVICE RESEARCHERS TO NEW SCIENTISTS AND ENGINEERS READY TO TAKE THEIR PLACES IN UNIVERSITIES, INDUSTRY, AND FEDERAL LABORATORIES. THIS SALIENT FACT GIVES ADDED VALUE TO RESEARCH FUNDED IN UNIVERSITIES, AND IT ACCOUNTS TO AN IMPORTANT EXTENT FOR THE EMPHASIS ON FEDERAL FUNDING OF RESEARCH THROUGH THE NATIONAL SCIENCE FOUNDATION.

IN FISCAL YEAR 1983 NSF GRANTS SUPPORTED APPROXIMATELY 9600 GRADUATE STUDENTS IN SCIENCE AND ENGINEERING. THE LEVEL OF FUNDING WE PROPOSE FOR FY 1984 WILL SUPPORT 10,400 OF THOSE STUDENTS, WHO WILL THEN BE AVAILABLE FOR THE LARGE S&T INDUSTRIAL PERSONNEL NEEDS PROJECTED FOR THE END OF THE DECADE AND BEYOND.

WE'RE DETERMINED THAT THE UNITED STATES WILL FACE COMING TECHNOLOGICAL CHALLENGES WITH THE WORLD'S STRONGEST RESEARCH AND TRAINING ENTERPRISE.

WE'RE ALSO AWARE THAT AN IMPORTANT PART OF OUR EDUCATIONAL SYSTEM IS INCREASINGLY COMPROMISED BY THE WORSENING ABILITY OF UNIVERSITIES TO COMPETE WITH INDUSTRY FOR TECHNICALLY TRAINED PEOPLE--NOTABLY RECENT PHDS FOR ENTRY-LEVEL FACULTY POSITIONS. IN THE PAST YEAR WE'VE BEEN CONSULTING WITH MANY PROFESSIONAL GROUPS AND UNIVERSITIES ABOUT THIS PROBLEM. OUR COMMON CONCERN IS TO FIND WHERE THE FEDERAL GOVERNMENT CAN APPLY RESOURCES AND LEADERSHIP TO INITIATE SOME NEEDED IMPROVEMENTS IN SCIENCE AND ENGINEERING EDUCATION.

WE'VE NOW DEVISED SEVERAL SPECIFIC NEW PROGRAMS TO ADDRESS WHAT WE FEEL IS THE MOST CRITICAL PROBLEM: THE INADEQUATE SUPPLY OF NEW JUNIOR ENGINEERING AND SCIENCE FACULTY IN UNIVERSITIES--AND THE SHORTAGE OF QUALIFIED SECONDARY SCHOOL SCIENCE AND MATH TEACHERS.

THE PRESIDENTIAL YOUNG INVESTIGATOR AWARDS PROGARM, TO BE ADMINISTERED BY NSF, WILL ATTRACT SOME OF THOSE RECENT PHDS TO UNIVERSITY RESEARCH WHO NOW GO INTO NON-TEACHING CAREERS IN INDUSTRY. OUTSTANDING YOUNG INVESTIGATORS WILL BE ELIGIBLE FOR UP TO FIVE YEARS OF

RESEARCH SUPPORT UNDER THIS PROGRAM, UP TO $100,000 PER YEAR OF SHARED FEDERAL AND PRIVATE SUPPORT. THIS MATCHING PROVISION WILL PROVIDE SOME EXTERNAL INFLUENCE ON THE FIELDS OF SCIENCE AND ENGINEERING THAT WILL BE EMPHASIZED, REFLECTING HIGH PRIORITY NEEDS OF INDUSTRIAL PARTICIPANTS. THE UNIVERSITIES WOULD PAY THE FACULTY MEMBER'S SALARY, SO THE ENTIRE AWARD AMOUNT WOULD BE AVAILABLE FOR RESEARCH. WE ENVISION UP TO 200 NEW AWARDS EACH YEAR; WITHIN FIVE YEARS THERE WOULD BE ONE THOUSAND YOUNG FACULTY--A SIGNIFICANT PORTION OF THE NATION'S UNIVERSITY RESEARCH FACULTY--IN THE PROGRAM.

ALSO, SEVERAL PROGRAMS WILL ADDRESS THE SHORTAGES OF QUALIFIED SCIENCE AND MATH TEACHERS IN SECONDARY SCHOOLS. ONE IS A PROGRAM IN NSF TO PERMIT CURRENT SCIENCE AND MATH TEACHERS TO UPGRADE THEIR SUBJECT MATTER SKILLS THROUGH UNIVERSITY COURSES. OVER A PERIOD OF THREE TO FIVE YEARS, THE PROGRAM WOULD BUILD UP TO ABOUT 10,000 PARTICIPANTS PER YEAR. THIS PROGRAM ALSO REQUIRES MATCHING NON-FEDERAL FUNDS. A COMPANION PROGRAM IN THE DEPARTMENT OF EDUCATION WILL PROVIDE BLOCK GRANTS TO LOCAL SCHOOL DISTRICTS TO PERMIT THEM TO TRAIN ADDITIONAL TEACHERS IN MATH AND SCIENCE. THESE WOULD INCLUDE TEACHERS CURRENTLY IN OTHER DISCIPLINES, RETIRED TEACHERS, AND INDIVIDUALS IN BUSINESS AND INDUSTRY. APPROXIMATELY 30,000 TEACHERS COULD BE TRAINED UNDER THIS PROGRAM OVER A FOUR-YEAR

PERIOD. THERE WILL ALSO BE A HIGHLY VISIBLE PRESIDENTIAL SCIENCE AND MATHEMATICS TEACHING AWARDS PROGRAM TO HONOR OUTSTANDING SCHOOL TEACHERS AND THEIR SCHOOLS AND TO EMPHASIZE THE NATIONAL IMPORTANCE OF GOOD SECONDARY SCHOOL PROGRAMS.

THE COSTS FOR THESE EDUCATION PROGRAMS WILL NOT BE GREAT, BUT BY CONCENTRATING RESOURCES STRICTLY WHERE THEY'RE MOST NEEDED--ON GOOD FACULTY--WE ANTICIPATE SUBSTANTIAL LONG-TERM BENEFITS.

FISCAL YEAR 1984 ALSO IS A TIME FOR MAJOR IMPACT ON ANOTHER UNIVERSITY RESEARCH PROBLEM--OUTMODED AND OBSOLETE RESEARCH EQUIPMENT AND INSTRUMENTATION. MOST OF THE ADDITIONAL SUPPORT FOR PURCHASE OF EQUIPMENT WILL BE INCLUDED IN THE FUNDS ALLOCATED FOR RESEARCH, RATHER THAN AS SEPARATE, COMPETING PROGRAMS. IN ALL, THE PROPOSED LEVEL OF BASIC RESEARCH FUNDING WILL INCLUDE NEARLY $400 MILLION FOR PURCHASE AND REPLACEMENT OF INSTRUMENTATION.

MR. CHAIRMAN, I HAVE TRIED TO DESCRIBE HOW THE ADMINISTRATION INTENDS TO IMPLEMENT ITS SCIENCE AND TECHNOLOGY POLICY--AND HOW THAT POLICY IS RESPONSIVE TO THE VERY REAL PROBLEMS OUR NATION FACES AS THE LEADING INDUSTRIAL FORCE IN THE WORLD. MY FOCUS ON PROGRAMS RATHER THAN ON NUMBERS

REFLECTS MY STRONG CONVICTION THAT OUR SUCCESS WILL BE MEASURED BY HOW WISELY WE USE WHATEVER RESOURCES ARE AVAILABLE, NOT BY HOW MUCH WE SPEND.

NEVERTHELESS, I RECOGNIZE THE INTEREST IN COMPARING LEVELS OF EXPENDITURES, SO LET ME MAKE JUST A FEW COMMENTS ABOUT THE DATA THAT APPEAR IN THE SPECIAL ANALYSIS OF THE R&D PORTION OF THE BUDGET.

THE COMPARISONS BETWEEN BASIC RESEARCH IN FY 1983 AND 1984 ARE DOMINATED BY TWO FACTORS: LARGE INCREASES IN THE PHYSICAL SCIENCES AND ENGINEERING--ABOUT 15 PERCENT--AND AN INCREASE OF ABOUT 3 PERCENT FOR THE LIFE SCIENCES. AS YOU KNOW, THE LIFE SCIENCES ARE A VERY PRODUCTIVE AND RICH AREA OF RESEARCH, AND THEY'VE EXPERIENCED A HIGH GROWTH RATE SINCE THE MID-1960'S. THAT GROWTH FAR EXCEEDED THAT FOR THE INCREASINGLY CONSTRAINED PHYSICAL SCIENCES UPON WHICH OUR INDUSTRIES SO DEPEND. TODAY THE LIFE SCIENCES ARE VERY HEALTHY, AND THE SMALLER INCREASES WON'T AFFECT THEIR VITALITY. IN A CLIMATE OF INTENSE FISCAL SCRUTINY, IT'S NO LONGER POSSIBLE TO SPREAD INCREASES UNIFORMLY THROUGHOUT SCIENCE. IN LIGHT OF THE SUBSTANTIAL RESOURCES ALREADY COMMITTED TO THE LIFE SCIENCES OVER A PERIOD OF MANY YEARS, WE BELIEVE THAT THE MOST PROMISING RESEARCH IN THOSE FIELDS WILL CONTINUE

TO BE WELL SUPPORTED. WE NOW HAVE TO CONCENTRATE ON THOSE AREAS IN THE PHYSICAL SCIENCES AND ENGINEERING THAT HAVE BEEN NEGLECTED, YET WHICH PROMISE GREAT RETURN TO OUR FOREMOST NATIONAL PRIORITIES--INDUSTRIAL ADVANCES TO FUEL OUR ECONOMY, AND DEFENSE.

FISCAL YEAR 1984 CAN BE A PIVOTAL YEAR FOR FEDERAL PROGRAMS IN R&D. WE'RE PROPOSING AN ARRAY OF SCIENCE AND TECHNOLOGY PROGRAMS THAT ADDRESSES CRITICAL NEEDS IN OUR SOCIETY. THE PROGRAMS PRESENTED TO YOU REPRESENT OUR IMPLEMENTATION OF THAT POLICY. THE ADMINISTRATION IS ANXIOUS TO JOIN WITH THE CONGRESS TO SET THE COUNTRY ON A PRODUCTIVE COURSE TO MAKE THE BEST POSSIBLE USE OF THE RESOURCES AND POTENTIAL OF OUR UNIVERSITIES, FEDERAL LABORATORIES, AND INDUSTRIAL ENTERPRISE.

MR. CHAIRMAN, THIS CONCLUDES MY FORMAL PRESENTATION. I WOULD BE HAPPY TO RESPOND TO QUESTIONS FROM MEMBERS OF THE COMMITTEE.

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Chairman DOMENICI. Dr. Keyworth, as far as the NSF scientific part of that increase that goes to physical science, how much will that go up by in 1984?

Dr. KEYWORTH. Seventeen percent.

LONG-TERM NEED FOR TRAINING IN SCIENCE AND TECHNOLOGY

Chairman DOMENICI. Now, Senator Chiles indicated that in 1985, 1986, and future years, that funding for NSF remains level. Could you explain that to us? Is that so, and if so, what is the reasoning?

Dr. KEYWORTH. I am not sure I can explain. Let me instead agree with Mr. Chiles' position. I believe that a single injection or a spike in the support of basic research is untenable and unconstructive. We are talking about training people, and there is a long cycle, as we all know, in the training process. I have looked at this thrust in the 1984 budget, and I believe that this has pervaded our discussions throughout the fall, with the President and in Cabinet councils and Cabinet meetings. What we are doing is addressing not just today's need, but a long-term need for greater dependence upon science and technology. I believe that this thrust, or at least some considerable continued measures to strengthen basic research, to strengthen our source of new talent, must be continued for an extended period of time.

Chairman DOMENICI. So you are telling us that you were able to convince the administration to put the increases in for 1984. Apparently there are specific programs that you are recommending be increased in fiscal year 1984. Would you feel bad if the committee in its targets—and that is all we do in the outyears, continues the growth for NSF on some path close to where you have started it in fiscal year 1984; is that correct?

Dr. KEYWORTH. It certainly would not bother me. But in addition, I must say that the emphasis that is represented in this budget was developed in the context of the fiscal 1984 budget and the President's considerations of that.

Senator CHILES. But that emphasis was a little different when it came to defense, though, wasn't it—it goes across the line?

SIGNIFICANT CHANGE WITHIN CIVILIAN RESEARCH

Dr. KEYWORTH. No. If I might focus something, it is true exactly what you said, that the increase in defense research is 29 percent, and the increase in civilian research is essentially zero. But within civilian research, there is a very significant change, and that is the very large emphasis on basic research, on training of new talent, and a significant compensatory decrease in civilian demonstration and near-term technology development projects that we feel are more appropriate for the private sector.

Senator CHILES. Well, even granting that—and I would like to get into that a little bit, maybe—but what I am pointing out is in defense, we have in 1984, 1985, 1986, 1987—it is not a spike; it is continuing all the way through. And yet in the impetus that we have talked about on the civilian side, it is 1984.

Dr. KEYWORTH. I do believe that the administration in total has been reacting to and absorbing the requirements that we must meet to achieve an expanding economy. I think the demise in our defense capability is something that we came into office understanding well and had a very clear-cut position on prior to the inauguration.

Chairman DOMENICI. Are you saying that one was clearly understood and we are beginning to understand the other one?

Dr. KEYWORTH. If I may slightly paraphrase that, Mr. Chairman, defense was an issue that has been before this Nation for a long time. The issue that we are facing in basic research and tomorrow's talent is one that has been propelled into increasing prominence over the past 18 months, not just by the administration but by the Nation, because of the challenges and the new competitiveness that we find our industries faced with.

Chairman DOMENICI. Included in the 1984 are several proposals that attempt to address a shortage of teachers, secondary math and science education. Could you describe with just a little more specificity—we do not go into the details here—but what is at the heart of those programs.

Dr. KEYWORTH. Certainly. And let me say at the very outset that we do not propose that the programs that we have undertaken are going to meet the totality of American needs for improved education. They are a beginning, and they are a lever.

MEETING THE NEEDS FOR NEW JUNIOR FACULTY

Now, the first program to which I referred is meeting the dire need for new junior faculty, in our engineering schools in particular and in many areas of science. We have proposed initiation of a program, jointly shared by industry and the Federal Government, that will provide very substantial research awards—and I emphasize the word "award" in contrast to a grant—to 200 recent selected Ph. D.'s per year, for a 5-year duration, thereby reaching a plateau of 1,000 young engineering and science faculty. They will be given an award with which to create the research environment in which to train new students. They will not have to go through the—should I call it occasionally demeaning—occasionally complex grant acquisition process. They will receive awards based on their personal excellence.

Chairman DOMENICI. Who will determine those?

Dr. KEYWORTH. We are now working out the exact mechanism with the National Science Foundation and with a number of societies and professional organizations, but we believe it should be done with heavy involvement of the private sector.

REWARD TOP REPRESENTATIVES

A second program that I think represents very high leverage is to have each State in the Union select top representatives of the pre-college science and math teaching community and to reward them, make heroes of them, if you wish and bring them to Washington, bring them to the White House. The President would personally receive them on behalf of the American people and would give them an award with which they could go back to their institutions and purchase computers or other teaching tools, according to their own choice. But it is recognition, as I said, making heroes of critically important members of our society.

In addition, there are efforts both within the National Science Foundation and within the Department of Education to stimulate improved science and math teaching in pre-college years. The NSF program has emphasized upgrading the subject-matter knowledge of current teachers. The Department of Education program has emphasized the totality of mechanisms that should be available to tbe States to meet their own specific needs. Of course, the National Science Foundation best understands our universities and colleges and is using that mechanism. The Department of Education is most closely linked with pre-college educational systems and teacher groups, and they would emphasize that mechanism and link.

Chairman **Domenici**. So that this is not the totality; there is something in the Department of Education contemplated in terms of math and science teaching and teachers?

DECADE-LONG PROBLEM FACING US

Dr. **Keyworth**. Correct. And Mr. Chairman, I do believe we are facing a problem that is going to be with us for, if I may project, a decade. And I think it is a problem that all of us will be looking at from year to year and finding where the most effective levers can be inserted.

Chairman **Domenici**. Secretary Bell told me recently that some States are adding—just for instance—one additional math requirement for high school graduation. If each State, tomorrow morning did that, Secretary Bell estimates it would require 34,000 additional certified teachers. Could that be correct?

Dr. **Keyworth**. I cannot testify to the precise number. The fact that it is a huge number is correct. In fact, if I may point out another number, we spend in excess of $100 billion a year in pre-college education in this country. That represents an enormous number of people. And when we consider the shortage of qualified personnel in these areas and in others—foreign languages—I believe that the magnitude of the problem is an enormous one, and it is one of the reasons why I address it as a decade-long problem.

NUMBER OF NON-U.S. STUDENTS STARTLING

Chairman **Domenici**. I have only one further question. The numbers are startling with reference to graduate science and engineering students. I am told that the number of non-U.S. citizens enrolled in those courses in our universities rose 41 percent in the 5 years between 1974 and 1979 and that U.S. citizens rose by 9. Have you addressed the issue that our science and engineering schools have such a small number of Americans as compared to foreign students?

Dr. **Keyworth**. We certainly have. You say the word "address." I am not sure there is a solution, because I am not sure the numbers themselves indicate the totality of the problem.

I believe the fact that American academic institutions represent the standard for the world, the very best, is partially because we are able to draw upon the excellence of much of the entire world. I think this is a real positive.

On the other hand, I think the fact that the growth in enrollment of American students is so low is a symbol of the problem that we are all addressing.

I guess what I am saying is, I think we should welcome the highest quality foreign students to our institutions. Naturally, I think our institutions should not turn aside qualified American students, we should be increasing the number of motivated and qualified American students. That means more emphasis on our schools. In many cases it may mean larger, but it also means better.

MOTIVATION PROBLEM MUST BE SOLVED

Chairman **Domenici**. I will close by saying that I am firmly convinced that the whole math/science area is critical. Certainly the problem needs to be addressed at the college level. However, I have talked to many school administrators and teachers in public institutions from grades 1 through 12, and I am firmly convinced that there is a huge problem in elementary and secondary schools in terms of motivation, and in terms of incentives, both for students and for teachers. I cannot imagine why the statistics show that by the fifth grade, the majority of our young children are turned off to math. I guess you know that, Doctor. We have to do something about that. If we cannot solve this basic motivational problem we will not be able to solve the overall math and science problem.

Are we going to do anything about motivation in your proposal?

Dr. **Keyworth**. It addresses them. It does not solve the problem. I believe we must pay attention to mechanisms, to motivations, to ways we use new technology. But—and I hate to be so old-fashioned—I think there is nothing like outstandingly qualified teachers who love their work to motivate students. Certainly we have got to pay attention to techniques, curricula, et cetera, but I think we have got to pay attention to the quality of our teachers and necessarily, that means compensating them commensurate with our reliance upon them.

Chairman **Domenici**. Thank you very much.

Senator Chiles?

Senator **Chiles**. Doctor, you made the statement that we are shifting our emphasis, and while the civilian research has actually gone down because of the shift in emphasis, we are taking care of the problems.

Can't we show quite a bit of very positive history where the Government's providing some money for demonstration has had a large payoff and has been very productive for this country; and do you think we can totally shift away and not do any kind of demonstration of some of our research and development and depend on this to be picked up? I love the idea that the private sector will pick this up, but many times, those in the private sector that have the capital or the wherewithal do not have the motive to pick up new technology because it is going to go against where their particular interests are, where their assets are, where their profits are. We recognized this a long time ago in the Government and felt it was necessary to demonstrate at times. Now you are coming around and you are saying we are making one fell swoop, that we do not need to do this anymore, so we can cut funds out of ERTA, or we can cut funds out of NASA, or we can cut all of these other funds, and say the private sector is going to take care of that.

BEST JUDGMENT USED IN EVERY AREA

Dr. **Keyworth**. As in the other areas of the budget, we have generalized goals and objectives, and just as this committee certainly does, we have individual issues. Now, what I stated was our central objective. We have tried to clearly delineate between the role of Government and the role of the private sector. But let me pick an example—aeronautics.

We have, over the course of the last year, conducted a comprehensive study of the Government's role in aeronautics research. Were we to begin the aeronautics industry today from scratch—that is, invent the airplane today—then I believe that it would be healthier for the aeronautics industry to maintain the entire base for aeronautics research. But that is not the way it is. NASA has long, long possessed a major and very, very competent role in aeronautics research. We have carefully examined this, and you will see a substantial increase this year in our proposal for aeronautics research. You will see, in fact, a commitment made to a major new numerical simulator, a giant super-computer. Now, that is an example of an area where the Federal Government both has a specific role because of military and where we have something that works.

Now, in energy I would offer a counter-example. I think much of the energy research we do is essential. It is critical, and it will be essential for the Nation's future welfare. But much of what we were doing was a classical example of driving out the private sector—at a cost to the taxpayers of nearly $30 billion in the decade of the seventies.

Judgment, I guess, is the conclusion of my statement. We have used judgment to the best of our ability, and I believe we can support, with individual arguments, each and every area where we have reduced and each and every area where we have attempted to increase.

Senator **Chiles**. Well, I hope so, Doctor, because I think you have been doing a great job, and I think in some ways, you have brought the administration along a little ways. I am also concerned that you, are not the only one who makes these decisions, and OMB and some others, and I happen to think that some of this money that we are talking about, the new money, is sort of done with mirrors, and that we are robbing Peter to pay Paul, and we are not actually talking about new dollars. And I do not think that we can take all of that money away. If we want to talk about demonstration, we could say we never needed to demonstrate the space shuttle, and once we had proven we had the technology, we could have just put that out and the private sector would have taken that over. I am not sure that would have happened.

And yet, I think there is a demonstration that we expect to have an awful lot of payoff for not only the government, but also the private sector, given the cargos that I now see we are talking about putting on the space shuttle, but we had to demonstrate that as well as develop part of the research and technology for it.

Chairman **Domenici**. You do not disagree with that, do you?

TECHNOLOGY STRONGLY SUPPORTED BY THE PRESIDENT

Dr. **Keyworth**. Not at all. And if I may add one comment, Senator Chiles, it is not a question of my convincing anyone. During the course of the last 4 or 5 months, we held a large number of Cabinet meetings with the President and Cabinet Councils on the subject of America's industrial competitiveness and industrial security. Out of that came a very, very strong Presidential commitment to the role of supporting and sustaining the role of technology. It is, if I may say, an eminently pragmatic approach—based upon the very deep principles that the President holds—that is embodied throughout this budget. The aeronautics and energy sections do represent two very different sides of a very similar issue, but they are things that the President, personally, very strongly supports.

Senator **Chiles**. I am delighted, and I hope we can help him along by making sure that 1984 is not just a spike and that we will continue it in 1985 and 1986 and in those outyears.

Chairman **Domenici**. Senator Gorton?

Senator **Gorton**. Thank you.

Dr. Keyworth, I would like to follow up a little bit on some of the questions by Senator Domenici. While all three of us here and many others congratulate you on some of the policies which you have persuaded the administration to include in the budget, it should be obvious to you and to everyone else that the percentage of the resources which will be devoted both to improving mathematical and physical sciences education in our schools and to the training of our teachers and to the training of better scientists and technicians which comes through these Federal programs is relatively small.

EMPHASIS PUT ON SHARED GOVERNMENT/INDUSTRY PROGRAMS

I think you have outlined in your answers to Senator Domenici that you have distributed funds through the Department of Education for general scientific, mathematical, and technological education and others for more specific projects through the National Science Foundation, perhaps more rifle-shotted at certain kinds of professions and keeping our technological and science lead in the free world. Do you have any views as to what areas Federal Government assistance can be most effectively used? Where are we going to get the most from our money—in general programs which provide a small percentage of what schools and colleges need for general scientific and mathematics education, or more precise and narrow subject areas primarily funded through the National Science Foundation?

Dr. **Keyworth**. Senator Gorton, that, as I am sure you are aware, is a question I am not sure anyone can answer in its totality. But since I used the word "leverage" before, let me come to that again.

I am personally very wary of programs which, if I may say, simply put a large sum of money on a tree stump and ask individuals, States, and local governments to come out and grapple for it. We have lived for decades with programs that carry the very laudable goal of improved science and math teaching; all too often they have pots of money with no direction. I think we have got to look very hard; we have got to work with industry, we have got to work with the teacher groups and the States and local governments to find the best solutions and the best levers.

What we have done directly addresses a couple of the most straightforward problems. We are very much wrestling with the question of how can we use computers and other modern technology. Not only can these tools expose children to a new technology and perhaps improve their mathematics ability and maybe even their self-discipline; they can also be used much more broadly, in more innovative ways, with associated graphics and displays—perhaps at home. We have got to pay a lot of attention to curriculum development that incorporates these new possibilities.

I have spent quite a bit of time recently with Dr. Knapp, the Director of the National Science Foundation, trying to wrestle, if I may say, from first principles with exactly these problems. We need a lot of help. We need a lot more people involved in the issue, and I believe programs that can focus the attention of the private sector, industry—as well as their resources, but particularly their attention—on these matters, are very important. So we have tried to emphasize shared Government/industry programs.

But it is not a problem that anyone is equipped to answer totally today.

Senator GORTON. Let me follow up on that. How do you propose, for example, to leverage expenditures in relatively modest amounts which are distributed over most of the school districts and many of the institutions of higher education in the United States, for scientific and mathematics education and see to it that they actually produce anything? What kind of levers are you anticipating using? And a related question, how do you measure whether or not you have had any impact? Can you measure the impact of some of these past programs, which may have been more diffused?

PROBLEM MUST BE ADDRESSED BY MODELS

Dr. KEYWORTH. In answer to the first question, I would say that models, leadership—that means trial thrusts—are perhaps the key roles that the Federal Government can play. We cannot address the whole problem, so we must do it by models, or perhaps by curriculum development. Certainly we should consider developing within the Federal Government the kind of expertise that can innovatively pursue this issue of high technology in teaching methods.

As far as measuring the results, States and local governments are going to have to do it by their own mechanisms. I do not believe there is a single test that can be readily given. To look at college board scores over a decade, en masse, is a meaningful indicator. But on a local level, I very much worry about the accuracy of looking at college entrance examinations.

But I really think that——

Senator GORTON. Well, if we were to look at those alone, we would say that the work we have done in the last two decades has had a negative effect.

Dr. KEYWORTH. I also think it indicates a real negative trend. I do believe that in science, in particular, and in mathematics, where it is less clear, it is unquestionable that since the peaks in the beginning sixties and late fifties, there has been a deterioration. I think you will see a corresponding decrease in college and university entrance requirements in pre-college mathematics and sciences. That has to be addressed, too.

I do not know of a single indicator, but I think that there are and will continue to be numerous mechanisms that the college entrance committees will be best equipped to judge.

PAY ATTENTION TO INDIVIDUAL MECHANISMS

Senator GORTON. Well, let me go to the second half of my first question, then. Do you think that the programs which are administered through the National Science Foundation will be even more precisely directed at creating models and specifics and a relatively small number of highly skilled people, rather than in an attempt in general terms to increase the mathematics and scientific literacy of the majority of the American people?

Dr. KEYWORTH. The answer is "Yes." I think we are going to have to pay a lot of attention within the National Science Foundation to individual mechanisms and hope that they will be widely used and, in fact, will be multiplied upon.

Senator GORTON. Thank you, Mr. Chairman.

Chairman DOMENICI. Thank you, Senator Gorton.

Dr. Keyworth, one of the other startling facts that I have found in looking at math and science education is the huge percentage of the typical 4-year universities' and community colleges' math and science budgets that now go for remedial math. I was absolutely astounded to find that nationally, community colleges now spend 74 percent of their math and science funds for remedial math and science.

Isn't the college level kind of late to be teaching remedial math and science?

Dr. KEYWORTH. Mr. Chairman, I could not agree with you more. I think it is a tragic misuse of our most advanced educational institutions and talents and skills to provide this remedial education. I think it is why all of us here are facing and addressing a problem that has got to go all the way down to the kindergarten level and into the home. Restoring parental respect and priority for achieving the very finest possible education for our children, I think, has got to be a key national priority.

TREMENDOUS NEED FOR MATH AND SCIENCE TEACHERS

Chairman DOMENICI. My last question is one which I would request that you do a little research for us and submit it to us for the record. In addition to awarding merit scholarship's to encourage young people to go on and become teachers, we need to consider the teachers who are already in the profession and teaching math and science. They are rapidly leaving their treaching jobs and we are not getting any new ones. In the junior high and secondary level, they are leaving in large numbers because they are attracted elsewhere. The immediate need is tremendous for math and science teachers in grades 1 through 12. I understand that at one point there was a similar shortage of huge proportions for title I teachers, and that for a period of time, the student loan program was used as an incentive. What occurred, from what I understand, is that student loans were made in the normal manner for teachers and aspirants of teachering. Then, if they succeeded, and subsequently taught for a certain number of years, there was a forgiveness provision built into the loans.

I wonder if you could find out if that had any real impact, if there is some way that it can be measured and then let us know if it has possibilities in terms of encouraging some students to be trained and teachers to be retrained to teacher math or science. I think this information has a bearing on some of the numbers we will be using if you could look into that for us.

Dr. KEYWORTH. Certainly.

[The following material was subsequently supplied for the record:]

IMPACT OF STUDENT LOAN PROGRAM

The impact of the student loan program is difficult to determine. Over the years, the law has been changed, and the student loan program has been expected to serve several social purposes. The available data do not allow a measure of the effectiveness of the program with regard to the Title I teachers shortage specifically. This type of program is usually more expensive than necessary because it lacks an identifiable target which would maximize the return. Thus, it is difficult to know to what extent the student loan program supported individuals would have gone into teaching anyway. Finally, this kind of program would not address any immediate shortage since there is a lag time of several years between award of the loan and availability of the teachers.

Chairman DOMENICI. We will ask Dr. Rutherford about that, also, but since Dr. Keyworth has to leave, I will ask if there are any further questions of him.

[No response.]

Chairman DOMENICI. Before Dr. Keyworth leaves, let me ask of the other two witnesses, is there any observation or comment that his testimony prompts you to make that you would want to make in his presence—because we are going to take plenty of your time here, another hour or so, and I am sure he can stay for a few moments.

TOOL UP TO ADDRESS PROBLEM

Dr. RUTHERFORD. This is a problem that is not new. We know lots of things to do. It is not that we are ignorant of problems and programs that work. We know how to reach young people and get them interested in science and mathematics. We know how to identify teachers who can study in the summer and profit from it, and we have done that without having to pass the hat to industry and to the States. We know how to deal with the undergraduate level to identify bright students and let them work with professors in the summer, doing real research and keeping interested in the field. There are many things we know how to do.

We know how to develop programs on television for children. So, when the administration and Dr. Keyworth say it is a very difficult problem, he is correct. When he says it is massive, it is correct. But the response, it seems to me, is not to talk about tiny models, but to tool up to address the problem, for it is a national problem—not altogether Federal—but it has to do with the national strength. I would like to see some greater movements and projections into future years of how we are going to get up to the level of involvement to undo a situation that is bad and getting rapidly worse.

Chairman DOMENICI. Mr. Moore?

Mr. MOORE. I would just like to comment that I certainly agree with the importance of the problem, but it is gratifying to see the change in the attitudes of many of the students now, back toward science and math, where for a decade or more, they seemed to be turned in other directions. I think that is going to apply some internal pressure to improve the teaching in these fields, and I think that should have a strong effect in being able to solve this problem in another decade.

Chairman DOMENICI. Thank you very much.

Thank you, Dr. Keyworth.

Before we start with your testimony, Dr. Rutherford, Louis Branscomb of IBM was scheduled to appear but was unable to come. He has prepared written testimony. It will be made a part of the record,[1] and if it is of interest to either of the two witnesses, certainly, we will supply you copies of it.

Dr. Rutherford, would you proceed?

Dr. RUTHERFORD. Mr. Chairman, with your permission, I would be prepared to yield my turn to Mr. Moore, who I understand would like to get an airplane back to the west coast.

Chairman DOMENICI. If that is the case, proceed.

STATEMENT OF GORDON E. MOORE, CHAIRMAN OF THE BOARD, INTEL CORP.

Mr. MOORE. OK, thank you.

As a founder and chief executive of a high-technology company, I am pleased to testify concerning support of basic scientific and engineering research by the Federal Government.

My company, Intel Corp., headquartered in California's so-called Silicon Valley south of San Francisco, is 14 years old and is one of the world's leading manufacturers of microprocessors and semiconductor memories. We employ about 12,000 domestically and a total of 20,000 workers worldwide. They cover the entire spectrum from highly-trained scientists and engineers to unskilled laborers. About one-third of our $900 million of total sales last year were exports, principally to Western Europe and Japan.

DOMINATION OF SEMICONDUCTOR INDUSTRY BEING CHALLENGED

The United States has dominated the world semiconductor industry since its inception, although that domination is now being challenged. The U.S.-based semiconductor industry presently employs about 200,000 people in this country and is the basis underlying most of modern electronics.

The high technology industry is built on the basic scientific research of the last few decades. U.S. domination in semiconductors and other high technology businesses is the result of U.S. research and especially the movement of research results into products and processes. My company and the microelectronics industry in general has in effect been mining the lode of basic scientific knowledge and understanding of materials and physical phenomena that resulted from basic research contributed by a number of sources, both domestic and foreign, including industrial, academic, and government laboratories. More of us are mining this lode than ever before as high technology industry expands. There is unfortunately no corresponding growth in the investment being made in basic research in physical science and engineering.

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[1] See p. 311.

Two decades ago, it was common for most larger technology-based companies to have a research laboratory looking beyond problems of immediate interest and expanding our supply of basic knowledge. Subsequently, many of these laboratories have atrophied and few replacements have been established.

COMPANIES DO NOT BENEFIT FROM OWN RESEARCH

There is a practical reason for this. The research laboratories did not in general have a positive effect on the companies that had them. The beneficiaries were often other companies—in Silicon Valley, often some of the new start-up companies.

While the importance of basic research to the development of successful companies is absolutely clear, its relationship to the applied research and product development work done in a particular company's laboratory is very tenuous. Basic information becomes a property held in common by the technical community. The practitioners of basic research exchange ideas across corporate and political boundaries, and collaborate and publish their findings in the open literature. Such cross-fertilization is necessary for rapid progress. A company benefits from performing research by being tied into this technical community and thus is aware of and able to capitalize on new ideas as they occur. A company typically does not benefit in any direct proportion to the research it supports, however.

RESEARCH COOPERATIVE ESTABLISHED

Many companies have realized that they do not benefit directly, so they are reluctant to support expensive research programs individually. In this vein, for example, the Semiconductor Industry Association, a trade association composed of most of the large semiconductor producers and microelectronic users, established a research cooperative this year. This nonprofit organization, the Semiconductor Research Cooperative, receives contributions from member firms and supports research programs, typically at universities. The industry as a whole benefits from this program, both from research that expands the store of knowledge and through an increased flow of graduate students with direct experience in areas of interest to the SIA members. To use my colleague Bob Noyce's analogy, the SRC is an attempt to restock the common pasture from which we all draw sustenance. Everyone pays, and everyone benefits.

While this is an important step, the SRC funding is only a few tens of million dollars a year--clearly a scale different from that with which you deal. It shows, however, the general industry recognition of the need for research support. This source can supplement Government support, but it cannot replace it.

I believe that because of the difficulty of a particular company to realize a return on basic research and because of the rapidly increasing importance of the science-based industries such as electronics and biotechnology in the national and world economies, that basic science is an appropriate area for the Federal Government to continue to support. I am happy to see the increased proposal in the 1984 budget.

Much of the university research in physical science since World War II has been Government-supported. I believe this has contributed greatly to our leadership in high technology. Other countries, especially Japan, are challenging us for this leadership. This would be an unfortunate time to back off.

PLACES AND METHODS FOR EXPANDING RESEARCH

I would like to state my opinion regarding the most productive places and methods for expanding this research.

First, I believe the country's universities offer the best value, both in terms of cost effectiveness and because the flow of students to the companies is effective in transferring the results to where they can be used. Support of university research directly addresses the shortage of technically trained people in the United States.

Second, reasonable stability in support levels is generally appropriate, although some real growth is required to maintain a constant level of effort since the cost of equipment to work at the frontiers of scientific inquiry increases far faster than inflation. Science cannot generally respond effectively to a sudden acceleration in funding. Similarly, a sudden cut in funding can result in the cancellation of important projects with the loss of any incompleted work.

Third, it is dangerous to plan and direct programs centrally. The nature of research is to follow promising trails toward new understanding. In the research with the greatest impact, the final destination can be far removed from the original intent.

One creative way to accomplish the spreading of decisions concerning which research gets support is to fund some of it through a corporate tax credit rather than through the various Government agencies directly. If companies were given a tax credit, for example, for the support of basic research in universities, each company could support the investigators and research areas that it considered most appropriate. These decisions would be made independently by a large number of interested and competent parties, and the quality of the programs supported would benefit from this diversification.

MAINTAIN PREEMINENCE IN HIGH TECHNOLOGY

In summary, the high technology industry is a large and growing part of the U.S. economy. We are dependent upon the continuing flow of basic scientific research results and on highly trained graduates with strong scientific backgrounds. Basic scientific information tends to become common property, making it difficult for an individual company to justify financing the research. But a growing body of basic information can certainly be used to benefit the country as a whole.

Others are challenging the preeminent position the United States has established in high technology. I believe it is clearly in the best interest of the country to invest in both basic research and the trained manpower to maintain our preeminence.

Thank you.

Chairman DOMENICI. Thank you very much.

Senator Chiles?

Senator CHILES. What is your time schedule? You watch that, and leave when you have to.

Mr. MOORE. OK. I have to catch a 5:30 plane at Dulles, so I guess I have to leave here about 4.

Senator CHILES. All right. Do not depend on us. You depend on your source there.

If he has got until around 4, maybe we ought to hear from Dr. Rutherford.

Chairman DOMENICI. Doctor, how long will it take you for your opening remarks?

Dr. RUTHERFORD. Ten or fifteen minutes.

Chairman DOMENICI. Let us do that, then, and we will have a little exchange.

STATEMENT OF DR. JAMES F. RUTHERFORD, CHIEF EDUCATION OFFICER, AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, WASHINGTON, D.C.

Dr. RUTHERFORD. Thank you, Mr. Chairman, Mr. Chiles, Mr. Gorton.

It is my intention today to talk about how scientific research impinges upon the future. The fundamental point I want to make is that the conduct of research and its application in our society depends upon intellect, depends upon people who are knowledgeable, not just scientists and engineers, but people who run our companies, people who are legislators or journalists, people who work in our factories or wherever. In a very fundamental way, investment in education is an investment in future research and hence, in the future of the Nation.

The second point I would like to deal with concerns the magnitude of the problem of science education, since my criticism of the budget that has been submitted by the administration has something to do with magnitude. Then I would like to make a comment about the appropriate Federal role in this area.

SCIENCE EDUCATION IS CAPITAL INVESTMENT

Science education is capital investment. We have now past the point where we can get by with a small cadre of highly trained specialists to do our research, to apply it, and to be our engineers, with the rest of us not quite understanding or supporting science education the way it needs to be supported. We have to look across the whole spectrum of people who are to be educated.

This means the scientific and mathematical education of all our young people. It means helping them understand the nature of technology—what it can do, what it cannot do, how it relates to science, how science and technology together relate to the wider culture and to our aspirations as a nation. We have to involve the entire educational spectrum; it is not enough to talk about graduate education, however good it is. As you pointed out, Mr. Chairman, we may not have people capable of pursuing graduate education unless the entire system is made strong, from preschool through the elementary and secondary levels, through junior college, and 4-year college.

Strengthening is needed in other fields. Changes need to be made in business schools, in law schools and other schools so professionals understand the nature of quantitative thinking and the nature of the scientific and technological enterprise. Bringing about these changes will take a decade or more. Nothing lasting can be done in education in 1 year or 2 years. Ups and downs in education come fast, so progress is slow.

BUILD A SYSTEM THAT CAN IMPROVE AND REPAIR ITSELF

If we are going to educate all the people in science and technology what is the cost of the investment? It will take a lot of human resources and a lot of material resources to do that. We have to provide qualified science and mathematics teachers, from elementary school to junior high school. Science in junior high school is an absolute disaster; the kids come out not understanding mathematics, not liking science, and cutting themselves out of the future pool of resources. This is particularly bad with youngsters who come from the economically depressed areas and with young girls. We have to increase the effectiveness of teachers. Even if we had good teachers there is no support system; there are too few hours; we cannot employ the right kinds of people because of rigidities. The curriculum is not responsive to the ordinary child; we have to redo that. We have to learn to use modern technologies to get the job done effectively, and that takes investment, substantial investment.

We have to build in a system that can improve and repair itself, not just take a shot at it and back off as we did after sputnik, but keep the process going. It is instructive, that probably the best scientific education this Nation ever had was in the 1960's. That is when we were all busy working on it. And as soon as we stopped working, the thing deteriorated very rapidly.

Chairman **Domenici**. What did we stop doing?

Dr. **Rutherford**. About 1968 the whole thing suddenly came to a precipitous halt, and 3 years after 1968, the budget at NSF, for example, dropped down to about a third of what it had been in science education. I think part of that was due to the mentality that said we won in space; we got a person to the Moon first. We did not understand, I think, that education goes on, and you do not just do it once.

PROGRAM INCREDIBLE SUCCESS

Chairman **Domenici**. I heard some people at a hearing recently, discussing new educational programs that are in the areas that you are talking about, up and down the line, in grades 1 though 12. I heard them say the post-sputnik effort failed. I challenged it, without much information. I ask you, it did not fail, did it? Did it not work during the time that it was given the emphasis and pushed by the governments, nationally and local?

Dr. RUTHERFORD. Senator, it only failed if you believe that the goal was, in that very short period of time, to get all the schools in America using the new curricula. But if you look at the quality of the teachers who were brought in and sustained, if you look at the upgrading of the curriculum that took place, at the young people, of a very young age, who became interested in science, it was an incredible success, for incidentally, a tiny investment. It is often said, "We poured in all that money." We did not pour so much money into it compared to the size of the enterprise. So I think those charges are simply wrong. Now, not all the programs worked. Not everything worked equally well either—but certainly, we know which ones did and which ones did not—for instance, there were fellowship programs that brought so many people into graduate study in science and mathematics. Many of us in this room probably benefited from that. I was a high school teacher at the time, and I remember being able to go to one of the best colleges in the land to study more physics because NSF identified me as a good teacher who was willing to go and study more. So, it worked.

Just let me say something about magnitude, though. Education is in the order of a $150 billion enterprise. That is, the magnitude is of the order of hundreds of billions. The scientific enterprise is of the order of tens of billions.

Now, if you want to make a change, if you want to have something happen, it seems to me the investment has to be somewhat proportional to the thing you are trying to effect. Now, the administration's proposal of $50 million is absolutely nothing in relation to the size of the problem. Maybe it is a start, but it is not sufficient, particularly when the program is only partially targeted to parts of the problem.

Chairman DOMENICI. But you do not want to leave the impression that the Federal Government is the main source of the 150, because they are not.

Dr. RUTHERFORD. No, no. That is right. They are about 10 percent at the most.

Chairman DOMENICI. Of all education.

Dr. RUTHERFORD. That is right. But it is an entirely crucial 10 percent, and in the case of these things focused on quality and content, as opposed to general things like equity, the investment was very much smaller, but this category was absolutely crucial.

Certainly, the load must be shared between sectors of government, State, local and Federal, between the private sector and the government sectors, foundations, scientific societies and the rest. But certainly, the investment in science and mathematics, to upgrade the schools alone, is in the order of billions—collectively—it is of that order of magnitude. And if we do not learn to do that, you know that State after State is withdrawing funds; locally, they are cutting back. The Federal Government cuts back. So our total investment in these things is declining.

FEDERAL ROLE MAKES SENSE IN SEVERAL WAYS

Finally, to leave time, let me say that I think, whatever the magnitude is, that the Federal role makes sense in several ways. One is where there is a long tradition as in research and development. It is a shame that we are withdrawing research on how to teach and learn science and mathematics better. We were just getting started in this country. It is just like any other thing; knowledge is going to help us do it better. So will research and development in science, mathematics, and in education. Where the resources are beyond the capability of the States or the private sector are areas where the Federal Government, it seems to me, must be involved, and that is why we talk about teachers. The total tab of restructuring and reeducating the elementary and secondary teachers of America is a large thing. The NSF program this year, they claim, will reach 5 percent of the high school science teachers. That means if you are a high school science teacher, that once every 20 years, you can go away for 4 or 5 weeks at the university. That is not dealing with the problem.

Where there are vital national manpower needs at stake, the Federal Government should pay attention. Where questions of equity for all of our people, rich and poor, are involved—the Federal Government should be going into science and mathematics; education should not be an accident of where you are born or your circumstances. And finally, where the Federal involvement is particularly crucial—let me give one example. One of the values of the NSF awards to science teachers was that the NSF is very prestigious. So if you are a local teacher, and you get this award—in a national competition, mind you—to go to a first-rate university, the local papers pay attention, the community pays attention, you pay attention.

So what should the Government do—certainly, research and development, and children's science television—you know that the Federal Government is probably going to withdraw its funds from "3-2-1—Contact," a program that children and their parents and their teachers love for getting the youngsters interested in science.

National Merit Fellowships for teachers is another possible area of support. Then, there is an array of things in which the government should not be the main funding source, but a partner with the private sector, and with the States. That has to do with teacher training, with equipment for engineering schools, with a host of things that we might want to talk about during the questioning.

Thank you, Mr. Chairman.

Chairman DOMENICI. Thank you very much, Doctor.

PREPARED STATEMENT OF DR. JAMES F. RUTHERFORD

SUMMARY OF TESTIMONY TO

THE U.S. SENATE COMMITTEE ON THE BUDGET

In my remarks I will deal briefly with three issues:

1. The importance of viewing science education as a matter of basic capital investment in the future of the nation;
2. The magnitude of resources needed to strengthen science education nationwide; and
3. The responsibility of the Federal government.

Science Education as Capital Investment

- The strength of our economy in the decades ahead will depend greatly on the quality of our basic and applied science and on how inventive we are at developing and using new technologies.
- This, in turn, will depend upon the education of our citizens, especially their grasp of science, their quantitative problem-solving skills, and their understanding of the relationship of these capabilities to technology and productivity. Science and technology literacy is important for all future workers and citizens, not just those who will become scientists or engineers.
- Producing such citizens must involve the entire educational system, kindergarten to post-doctoral, and all disciplines and fields.
- We can have a strong educational system only if we are prepared as a nation to make a substantial investment over a long period of years---quick fixes will not serve the nation or solve the problems that have developed over the last decade or so.

The Magnitude of the Investment

- We must invest enough of our material and human resources for a long enough period of time to:
    1. Provide qualified teachers of science and mathematics for students at all grade levels.
    2. Increase the effectiveness of science and math education by updating the curriculum and making wider and better use of the new information and communication technologies.

3. Build a capacity of insuring continuous progress over the coming decades.

- Education in America is a $150 billion a year enterprise. To change a system of that size requires a proportional investment. Eventually the nation must be prepared to invest some billions of dollars to reinvigorate science and math education in the nation, and to build a system that addresses our technological future.

- Furthermore, the resources for this investment must be aggregated and distributed in a way that recognizes that developing a national capacity to provide education for leadership in a technological world is complex and that there are necessarily many players in the game.

The Federal Role

- The Federal government should assert its intention to take the lead in funding certain categories of science education programs and begin a thoughtful phasing-in of appropriate action programs.

- Federal leadership is appropriate in those kinds of activities that are:

    - Federal by long and accepted tradition
    - beyond the resource capability of the States or the private sector,
    - related to vital national manpower needs,
    - helpful in achieving national equity,
    - valuable due to their strong link to Federal involvement.

- Some examples of the kinds of programs that the Federal government should bear the lead in supporting are:

    - research and development,
    - children's science television,
    - science talent identification programs,
    - national merit fellowships for science teachers.

In addition, the Federal government should indicate its willingness to join as a partner with the States and the private sector in other programs for science education to:

- upgrade the preparation of teachers now teaching science and math in the schools.
- increase the quantity of qualified new science and mathematics teachers being produced by the universities.
- modernize the teaching of science and mathematics through better and more extensive use of communications and information technologies.
- increase the capacity of engineering schools to make room for qualified applicants.
- upgrade the instructional equipment in engineering schools especially, but also in university science departments.
- deal with the severe shortage of engineering teachers now, and university science teachers in the future.

Chairman **Domenici**. Senator Chiles?

NSF DOING NO WORK IN CURRICULAR DEVELOPMENT

Senator **Chiles**. Dr. Rutherford, in the postsputnik era, the National Science Foundation took a lead in developing math and science curricular materials. Are you focusing on that now?

Dr. **Rutherford**. I am not at the National Science Foundation any longer.

Senator **Chiles**. Well, is the National Science Foundation?

Dr. **Rutherford**. No, sir. It has entirely removed itself from curriculum development. They are doing no work in that area.

Senator **Chiles**. They are not doing any work?

Dr. **Rutherford**. None. A part of that, I must say, happened at about the same time, 1968. There was not only the feeling that the crisis was over, but some political problems developed with regard to one or two of the curriculum projects at NSF, one of them was in anthropology, and as a consequence of that, the whole effort was weakened.

Senator **Chiles**. Well, don't you think that it would be beneficial if the National Science Foundation was involved in that again?

Dr. **Rutherford**. Absolutely. One of the great inventions of the 1960's was finding ways in which scientists and mathematicians and engineers would work with teachers in the school setting to develop new kinds of materials and programs; it was very valuable then; it is essential now.

EFFORTS MADE TO REDUCE NONTARIFF BARRIERS

Senator **Chiles**. Mr. Moore, one of the major concerns that we heard from the semiconductor industry at our hearings a couple of years ago was the trouble with Japanese competition due to their nontariff barriers that were keeping our products out, and that their banks for lending had much better long-term tax incentives for capital investment; in other words, they had targeted and were really providing the capital. Has there been any improvement in that in the last couple of years?

Mr. **Moore**. There have been efforts to try to reduce nontariff barriers, but I think we have the continuing problem of defining exactly the differences in the Japanese system that gave Japanese companies the competitive advantage they have in their home market.

It certainly is an entire system that we are competing with over there. In fact, I have a colleague who says we are a company competing with a country, which puts us at a disadvantage in some very real respects. One must also say that the Japanese have done a very good job of serving their customers.

This problem is being addressed by our industry association, and fairly broadly by the Government. The problem has been that the U.S. semiconductor companies compete in Japan only when they are sole source suppliers of the product and lose the market as soon as there are local suppliers. The net flow of semiconductor devices—the trade balance in devices—has changed dramatically for the United States and Japan over the last few years. Japan was a net importer of semiconductor devices through about 1976 and was about neutral for a while. In the last 2 years, it has become a large net exporter, focused on the leading edge products. The United States was a net exporter of semiconductor devices through 1980, and in the last 2 years, has become a significant net importer.

Senator CHILES. We are a net importer now?

Mr. MOORE. We are a net importer of semiconductor devices now. And so, we have a very dangerous change in the trade situation with respect to Japan, in this basic industry upon which our whole electronics and most of the high technology things are based. It is a problem that needs addressing. I wish I could give you three things that, if we did them, would solve it, but I do not have a simple answer.

Senator CHILES. I wish you could, too.

JAPANESE INVESTING HEAVILY IN R&D

Well, my understanding is that the Japanese are going out sort of on the cutting edge much more now in their research toward further development, and are spending considerably more and investing more. In other words, they are not mining the lode as much as we are spending our time mining the lode, and they are plowing back and going much further. And so, while we had the lead for a long time, and they were picking up from us, that is going to change, and they are going to have the newest and the best in the way of the technology.

Mr. MOORE. Well, there is a difference in focus here. The Japanese are not only mining the lode of basic scientific information; their products have been either copies of our products or relatively easy extrapolations. In fact, this is how the Japanese became important participants in this business. They could see what the next memory product was likely to be, since every 2 years the next generation memory product was four times as complex as the previous. They could anticipate when the 64KRAM, which is a product that has gotten a lot of visibility, would be there, and they targeted their industry to enter at that point.

So, they really have not only mined the technology that existed; they have used our product definitions to a significant extent.

JAPAN FOCUSING HEAVILY ON MANUFACTURING TECHNIQUES

But the Japanese are now investing very heavily. Their capital investment in the semiconductor industry is about equal to ours now, where in the early seventies, we were spending three times as much as they were on production capital investment. Their R&D investment is something like 70 percent of ours now, but on a percent-of-revenue basis, still only half as large. But the directions are such that in a few years, should the trends continue, they will pass us on the amount of direct expenditures on semiconductor research and development—although its focus in Japan is much more heavily toward the manufacturing end than it is toward product development and new technology.

Senator CHILES. Much more toward the manufacturing end?

Mr. MOORE. Yes, manufacturing techniques and the like. That really seems to be the direction in which the Japanese focus——

Senator CHILES. Rather than——

Mr. **Moore**. Rather than basic technology, new product design, that kind of thing.

Senator **Chiles**. Will that give us some advantage in the future, if they continue?

Mr. **Moore**. Well, it is a mixed blessing. They keep us on the leading edge, with them picking up all the very large volume production. Over a period of time, that destroys our ability to continue to invest, unfortunately, because the volume production base is necessary both to enhance the technology and to generate the capital base to expand.

Senator **Chiles**. I see. Thank you.

Chairman **Domenici**. Mr. Moore, I want to first—and I forgot to do this—tell you how pleased my State is, and particularly Albuquerque, that Intel has a new facility there and chooses to have one of its operations there. I am sorry it has been delayed, and we fully understand, but I wanted to tell you that publicly.

Mr. **Moore**. Thank you.

DIVERSIFICATION OF RESEARCH BY THE PRIVATE SECTOR

Chairman **Domenici**. With reference to your notion of diversification of research by the private sector, you explained how difficult it is to do in-house research now. You talked about tax laws as a means of permitting the corporate sector to direct its attention, and you used the university as an example, you could contribute and deduct. Is there something wrong with the 25-percent tax credit that we made available in the Tax Code 2 years ago?

Mr. **Moore**. The only thing wrong is it is due to expire in 1985 if it does not get renewed. It was certainly a step in the direction of allowing us to increase our research expenses. We can do that internally, or we can use it to support research at the universities. I was proposing an extension beyond that, perhaps a 100-percent tax credit for work supported at universities. That would make us effectively the agency that handled the Government's money in supporting this research. By doing that, we would have our best technical people saying, "Where should we support research that will have an impact on our industry eventually?" By getting the number of decision points spread among the competent technical community, rather than focused in a few Government agencies, I think you would get diversification in the areas chosen, and that is very valuable in supporting research. It is an alternative way, really, for the Government to support the research by tapping a resource in the private sector to direct it.

Chairman **Domenici**. So you are suggesting three things: Be sure we extend it; second, that we consider a larger percent, and that if we do, we might even target that at universities.

Mr. **Moore**. Yes. I think the last two could be tied together very effectively.

MOMENTUM NOT RETAINED

Chairman **Domenici**. Dr. Rutherford, just one question. If there was a failure in the postsputnik emphasis, it appears to be because we did not retain the momentum. It seems to me that the momentum for an area so integral and important to education should have been picked up a little more by the primary functionaries, the public and the parochial schools. It seems that all went well as long as there was seed money—and it was not a huge amount, I agree with you—but why did it not then get built into the curriculum where there is now such a huge deficiency?

Dr. **Rutherford**. I think that there were several things happening in the country at about that time. One was the trend, that began to become stronger, of moving funding away from the local authorities and to the State. In many States, for example, in California, the proportion between State and local funds has just reversed in a period of 4 or 5 years. So as the local interest in essentially supporting the system narrowed, so did some of their interest in these details.

The second thing to be said is that the process is a long one of renewing the curriculum, and it is a process that not only has to have good materials, but teachers who can see them and then, 1 year or 2 later, get some training and try them a little bit, and then, a couple of years after that, get some more training, and to actually fold them into the system takes a long time.

Then there was an economic turndown, and let me say that one of the consequences of that, that is, where the schools in general are hurting, was the cutback on instructional materials. Most of the new science programs were in fact more expensive. They called for apparatus, they called for activities for films, and as the cutbacks took place, they went more and more to the textbooks, and the textbooks are getting older and older, and if you go into American schools today, it will make you very sad to see that the instruction is very bookish in science—that is the main, and in many cases, the only resource they have. If you are only going to have a textbook, you really cannot use the newer developments.

NO SURPLUS OF SCIENTISTS

Chairman **Domenici**. Maybe it was the economic downturn during that 10 or 12 years, including this one, but it seems to me that this society is driven by demand. I think we had an excess of people in the physical sciences and engineering, and young people were not as enthusiastic, because they did not have the same job opportunities in these fields 8 or 9 years ago that there are now.

Dr. **Rutherford**. Yes; there were those perceptions. I think unfortunately the perceptions were wrong. We never really had much of a surplus of scientists, and in my judgment, almost always a shortage of engineers in the last two decades. Mr. Moore may see it quite differently from that.

But the perception was there, so I think that is one of the reasons. I would also add that there was some social/cultural thing happening in America——

Senator **Chiles**. Well, it was more than a perception, I think. Engineers' pay from coming out of the university dropped dramatically.

Chairman **Domenici**. For some period.

Senator **Chiles**. Yes.

Dr. **Rutherford**. But a very short period.

Senator **Chiles**. I am not sure what years that was.

RECESSIONARY PRESSURES MEANT FEWER JOBS

Mr. **Moore**. There were a couple of years in the early seventies, in the 1974 time period in particular, where the recession coincided with a significant decrease in aerospace funding by the Government in particular. The recessionary pressures meant that there were not as many job offers for the new engineers coming out of school. There were also some very highly specialized engineers coming out of the aerospace industry that did not really have any analogous positions available in the industries that were stronger, so they created some unemployment in the engineering ranks. That disappeared in a couple of years. We have been struggling to get all the technical people we have needed ever since.

Senator **Chiles**. Well, prior to that time, of course, when we really scaled back on our space effort before we came back with the shuttle, a lot of our space engineers and scientists were pumping gas. The cape went through a terrible recession, and all of our particular universities that were geared up for that—that degree was not worth anything, you know, for a while.

Mr. **Moore**. That was a case of specialization in an area that did not have any industrial analog.

Dr. **Rutherford**. That affected more of the people maybe in the senior year of high school, or junior year, or undergraduates. But the other thing that was happening, Senator, and I do not know quite how to phrase this—Dr. Keyworth talked about the home—was the kind of relaxation in America in the sense of addressing difficult subjects and taking courses they did not have to take. When the schools reduced their standards, when the universities reduced their entrance requirements, why would people take advanced mathematics and physics when they could take something else that seemed at least easier on the surface? That whole attitude, which I think is turning around now, was part of the picture at the time.

EXPLOIT NEW TECHNOLOGY

Chairman **Domenici**. My last question to you, Dr. Rutherford, is this. It has been suggested that the motivation and excitement in these fields we are speaking about today has to start down at the grade school level. I think that is absolutely correct. I was a teacher before I became a lawyer. I also have a large number of children—just practical experience tells me that is the case.

We are so addicted to using television, it appears to me that we are not doing a very good job today in either the public or the private sector in terms of broadcasting media, in producing programs that cause excitement, and cause our young people to think about science.

Did I hear you say we know how to do that?

Dr. **Rutherford**. Yes; the United States has very good producers of films for children, television programing for children. The Children's Television Workshop has done some marvelous things, and "Sesame Street," "3-2-1-Contact," and others. We know how to do it. And I agree whole-heartedly. When I visit my son, who is a third grade teacher, and I visit his class and see what those youngsters are like and how they respond to science, I know the problem is large. I think our only chance is to really exploit the new technology. I would like to see this country have an education satellite dedicated to use by children and teachers that would deliver science and ideas and information from our best schools, from our best scientists, and from our best people; in addition, there should be programs for teachers so that those elementary teachers would not just have to read, but could see good instruction, could get ideas visually. We have the technology; we need to bring it to bear in the elementary years, and then, with use of technology and some specialists—who, incidentally, could be paid more than the average teacher—to help the other teachers, you could then have an enriched experience in those early years to be picked up in later years by other kinds of instruction.

Chairman DOMENICI. Senator Gorton?

SHARING WOULD BE ACCEPTABLE

Senator GORTON. Thank you, Mr. Chairman.

Mr. Moore, one minor question in relation to your proposal regarding tax credits. You state, I think quite accurately, that it is important to decentralize the kind of research about which we are speaking, to have a large number of people making decisions as to what is important and is likely to be instructive, especially if it is funnelled through universities. You also said that your company, under those circumstances, would get its engineers and executives together and decide where that research would be most important.

Don't you think that you ought to have to contribute to that to some modest degree, that a 100-percent tax cut is a little bit high, when obviously, you are going to be making choices, which you hope will be to the advantage of your company? Shouldn't there be some contribution, some discipline on the part of companies, even under your own theory?

Mr. MOORE. I certainly would find that acceptable. We contribute quite a bit to the universities now that is 100 percent our own money, and we would plan on continuing to do that. It is an important thing for us to do. I was proposing this as an additional way, I think, to tap the industry, if you wish. But I think a method that has some sharing would be a completely acceptable way to go.

ADVANCE TECHNOLOGY AS FAST AS POSSIBLE

Senator GORTON. Thank you. The more important question which I have for you is I would like to expand a little bit on your SRC. Tell me how widely applicable you think that kind of cooperative research enterprise is, not only in your own industry, but across industry lines.

Mr. MOORE. Well, of course, I know my own industry far and away the best, and I think here, getting outside competition was important in welding us together to see the need for doing something like this. We consider one of the most important things we can do to keep our industry strong is to advance the technology just as fast as possible. We think that is our best competitive position in the world.

Now, I could imagine that it could be important to do the same kind of things in an industry that is forming, like the biotechnology industry. It is going to be dependent on a lot of basic research information, coming out of a variety of universities. In that industry, though, there are, for the time being at least, a lot more problems associated with things like patent ownership than in our industry, so it may not be nearly as applicable.

In the semiconductor industry in particular, patents are almost worthless, because they are so numerous and widely disbursed. We all have to use one another's inventions in order to practice the technology. So, the net result is we all trade all of our patents, essentially, just to be sure we cannot interfere with one another's business. So, there is no patent problem for us to handle.

COMPANIES NEED EACH OTHER

Senator GORTON. Could a cooperative enterprise of this sort ever be as effective as the total of individual research efforts within individual corporations combined? Could it be more effective?

Mr. MOORE. I think one does not really remove the need for the other. In participating in the Semiconductor Research Cooperative, the companies are putting in one-tenth of a percent of their annual revenues. That is the nominal number. These companies are typically spending 10 percent of revenue on research and development internally. So, it is 1 percent of the total research effort. It is small now. It will grow some, but it will always be less than 10 percent of the total expenses.

Senator GORTON. It is never going to take over for your own internal research and development.

Mr. MOORE. No; absolutely not. Of course, the internal R&D gets directed very specifically toward the interests of the company. The focus is on product development, process development and understanding those things that are specifically necessary for us to know, rather than generally contributing to the pool of knowledge.

Senator GORTON. I asked my questions of you first, because I am very worried about that plane of yours. I have concluded my questions of you, and I am here alone, so you are now free to leave and catch that, if you wish, and I thank you for being a part of this.

Mr. MOORE. Thank you.

Senator GORTON. Dr. Rutherford, I have listened to what you have to say, and I have gone through the written outline which you have here, and I must say that I find the precision with which you outline the Federal role in leadership areas to be both refreshing and accurate. These are the kinds of things which the Federal Government is likely to be able to lead in best, and I think we have just talked about the education of children through television, for example, as an example of that.

UNDERWRITE DEVELOPED PLANS

Obviously, those areas in which you indicate that we should be a partner are, of necessity, a little bit more generalized and vague. How do we assure to the best of our ability that when we spend moneys in these partnership areas, that we actually reach at least some of the goals at which that money is aimed, rather than simply to transfer money from one huge bureaucracy to another huge educational bureaucracy, primarily for the benefit of that bureaucracy?

Dr. RUTHERFORD. I must say that history is not encouraging on the kinds of programs in which the Federal Government has had certain goals and said, "We will be partners with you 50 States out there and send you some money." When those programs have been looked at carefully, very often, the way the funds were spent did not address themselves to those Federal goals.

As a matter of fact, I think if you were a superintendent of schools, and some money showed up and the Federal Government said, "Use this for science education of some sort or other," you would look at your own priorities and with your own way of talking about it and creative bookkeeping, you would put the money where you think it needs to go.

I think what can be done is to support the kinds of programs where the Federal investment is based on something that happens previously with the partners. To cite one example, take the case of the retraining of teachers. It seems to me that aside from the question of identifying outstanding teachers and sending them to the best universities, the real opportunity to upgrade a set of teachers is to upgrade the whole set. As you look in a school building at all of the science teachers, and do not say let us pick out one or two to go somewhere, but let us develop a plan over a 3- or 4-year period that will address the individual retraining needs of those people, and that when such a plan has been developed, written down, and submitted through the State office, then the Federal Government will be a partner on some equation in helping to underwrite it.

Another example of where partnerships can work is through the university, where they develop the programs, coordinate them with the schools, and the Federal Government puts in a certain amount of money. The use of computers might be an example there.

But this is why I do not believe in block grants because, by and large, they have not worked, and in education it is even harder to get them to work.

I should say—and I do not remember if it is on my list—there are certainly some areas in which the Federal Government has no business.

Senator GORTON. Why don't you outline those?

AREAS WHERE FEDERAL GOVERNMENT HAS NO BUSINESS

Dr. RUTHERFORD. Well, for example, the standards for graduation from the schools; the policies related to promoting youngsters, whether or not they pass at this or that time; admission to the universities and colleges in the State is the business of the State. The licensing practices—crucial matter—licensing of teachers, accreditation of universities, I think those rules are badly in need of change. I think the States have to learn how to use people part time, do lots of things they are not doing, but they have to solve those problems.

There are problems related to subject matter content. Now, whereas I do not think the State and local authorities are really able to generate modern curriculums in science and mathematics, on the other hand, they can make the selections if there are an array of things to choose from. So the final curriculum, the options available, the length of the school year, that is a State proposition.

I should add that some of these matters are not trivial, that the typical State in this country will have 180 days of school. Typically, in other countries, it is anywhere from 210 to 240 days. So those kinds of rules, I think the Federal Government simply cannot do, nor can the Federal Government impose final examinations on people.

Senator **Gorton**. Thank you.

Senator Exon, we are down to the last questions of the last witness. This is Dr. Rutherford. Would you like to add anything?

Senator **Exon**. Well, thank you. Have you finished, Senator Gorton?

Senator **Gorton**. I have finished. If you arrived 3 seconds later, you would have had the meeting adjourned.

Senator **Exon**. I was tied up on another matter, but I felt that the witnesses we had today were particularly important, and unfortunately, we hold them on Friday, and things go downhill pretty rapidly around here on Friday afternoon.

I understand that you have testified on the fact that you are concerned about the oversimplified block grants approach. If we think that there are shortcomings in our educational system, if we want scientists, if we think that is important, then I guess the general thrust of your testimony was that we had better spell it out some way, rather than just leaving it up to the block grants to handle the process.

I assume the same thing would be true of the other specialty fields in addition to the sciences?

Dr. **Rutherford**. Yes, sir, I think the same thing would be true. There is a special problem in the case of technical fields, but I think the general proposition is true, as you have stated it.

LEVEL OF FUNDING NOT SUFFICIENT

Senator **Exon**. What do you think of the level of the funding? As an educator, I suspect that you would think it should be more, if we are as concerned about this as we think. But have you made recommendations to the committee on the level of funding, assuming that as far as science is concerned, we would earmark it some way, evidently as you have suggested? Do you think that the level that we are talking about is sufficient to meet at least the immediate needs?

Dr. **Rutherford**. No, sir, I do not believe it is. I do not even think it is very close. I do not know what the total amount is, but before you got here, I made the vague claim that the problem was in the range of some billions of dollars collectively among all levels. The Federal proportion of that, it seems to me, at least is going to run into some hundreds of millions, and that that is the unit of expression, not tens of millions. To build a nationwide system of communications and materials and develop curriculum, to do research, things that are not being talked about in the administration bill at all, to deal with the very difficult, vexing problem of our not producing new teachers, is not going to lend itself to an easier, inexpensive solution. I would like to see the land grant idea applied to the production of teachers, but that is a whole different enterprise. That is the area, incidentally, in which I think we know least what to do.

So if one agrees that it is a complex issue, with lots of inputs from various places, but it involves research, the development of materials, retraining of teachers, the training of new teachers, the utilization of television and computers and other technologies, the restructuring of schools, then a few tens of millions will not do.

CORPORATIONS NOT EXPECTED TO PICK UP PUBLIC'S BURDEN

Senator **Exon**. Let me ask one last question, then. We hear a great deal about volunteerism; we hear a great deal today about the corporations doing more in the whole broad field of trying to relieve some of the burdens of the taxpayer directly. Do you feel that the private sector, for example, those who would most likely attract scientists, are doing as much as they could or should in the area of grants and things of this nature to enhance the sciences?

Dr. **Rutherford**. I think they are doing quite well, as a matter of fact. I must say that my own bias is that I would be happy to have our industrial enterprise and our business people really working hard to put us in a more competitive position, as business and technical enterprises, and that they should not use very many of their material resources or intellectual resources trying to solve the difficult problem of education.

I think they have a key role to play, however, in dealing with the ideas—what is it we want from our youngsters, what kind of graduates, where are they going to fit in—helping people in education understand the purposes of education. I think they can do that by participating in the process. I think they can provide some funds that help to highlight the issues, and help provide key funds here and there. I myself and my association are the beneficiaries of two very nice grants, one from Phillips Petroleum and one from Standard Oil of Ohio. I think they can do key things.

But if you are looking at the general matter of upgrading American education, then it is going to come from the public or it is not going to happen. The other support is too small.

Now, there are other private sectors. Incidentally, I am not opposed to volunteerism. I just think it is a more general solution. We are trying to put science and engineers to work at the community level, supporting libraries and museums and the schools, but in the end, it is a more complex problem than that.

The foundations—which are a great American invention—can play a key part, but once again, I do not think they can take over the role of trying to grant funds to make up for the differences in the loss of public dollars for a public responsibility. I would like to see the foundations have every opportunity to do what they do best, which is to gamble, to bet on people who are unusual, who have great ideas, or to deal with things that are too unpopular for government or for business. But I would not expect them to pick up the burden of what belongs to the public.

INDUSTRY NOT "RAIDING" YOUNG PEOPLE

Senator **Exon**. In the last few years, have you seen the private sector, that naturally likes to attract some of the brightest scientists and engineers, cooperate with the universities that specialize in this area, or have they been part of the problem by increasing their "raid" on some of the brighter young people who might otherwise have started in the profession of helping us to develop, through our educational system, more scientists and more engineers? I have been led to believe that there has been somewhat of a drain of our new young talent out of our institutions into private industry. That is good for the people who are doing it, but might not be so good for the institutions.

Dr. **Rutherford**. I think you are right. The industry in that case is both the problem and part of the solution. I do not think they are "raiding"——

Senator **Exon**. I put that in quotes.

Dr. **Rutherford**. Yes, well, it is usually used that way, but in my judgment, they are doing what they need to do—go out and get talented people to do their work. And it is up to the engineering schools and the universities to find a way to make their areas more attractive. You see, it is not only a question of funding. We talk about high school teachers leaving their jobs, and there is some talk about differentially increasing their pay; there is talk about increasing certain professors' pay in engineering schools. Well, that is part of it, but in fact, the working circumstances are not good. In the engineering school, if you cannot do research, if you have too big a class load, then that makes it even less attractive. In the high schools, if you teach 25 hours of science a week, you have 150 students to deal with, you have other kinds of duties, you have no support, you do not have a secretary, a telephone, an office, you haven't any laboratory equipment—when you put all that together with a low salary, then when you read the paper and see that there is this job you present yourself to them. They do not have to come to you.

I think many enlightened companies now are seeing the advantage of working out cooperative arrangements, particularly with engineering schools. I think some of them are beginning to do some things with the high school teachers that will be very, very helpful. But in the long run, it is not, it seems to me, necessary for American industry to suppress itself; it is for the universities and schools to become, in a sense, competitive on our general economic level.

Thank you, and thank you, Mr. Chairman.

Senator **Gorton**. Thank you, Senator. I am glad you arrived when you did.

Thank you, Dr. Rutherford.

The meetinq is adjourned.

[Whereupon, at 4:02 p.m., the committee was adjourned.]

TESTIMONY FOR THE SENATE BUDGET COMMITTEE

Friday, February 18, 1983

Lewis M. Branscomb
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The Budget Committee is to be commended for this hearing, for the work of this committee should assist the Senate and the Congress to understand as inter-related parts of an important national issue, the quality of mathematics and science education in our schools; the vitality of the nation's basic research enterprise and professional education; and the competitiveness of the technology in our commercial enterprises and thus the ability of our economy to provide useful work and a good life for all the people. The public and the Congress have long been interested in all three issues: the schools, the nation's scientific research, and the economy. What is new is the widespread consensus that the roots of our economic prosperity have been neglected, that science and engineering education are critical to the job of rebuilding, and that concerted efforts of industrial, academic and governmental institutions at all levels will be required to accomplish the needed rebuilding.

The American people seem to be eager for this rebuilding process to begin. For the first time in our history many Americans no longer expect their children to enjoy a better life than their parents when they grow up. Unless the growth of U.S. productivity, in services as well as manufacturing, is rekindled, a decline in the standard of living can be predicted, instead. Communities all over America, governors, business leaders, scientists and educators are calling for this rejuvenation and taking practical steps to achieve it.

An impressive example is that of the State of North Carolina whose Governor, James Hunt, is successfully nurturing the growth of North Carolina's industry and the attraction of new, high-technology firms by a combination of commitment to excellence in precollege math and science education, the stimulation of research and graduate education in the State's universities, and the provision of an attractive climate for business. Governors in many other states are not waiting for the resolution of the debate about the Federal role in science education or in the stimulation of industrial technology before they set out to compete with one another to attract the kind of industry and service jobs they want for their states. In my opinion, this is a healthy competition and it is bringing forth many ingenious and effective examples of cooperative activity. University-based microelectronics centers, for example, are being constructed in seven or eight states, primarily with state and private industry contributions with relatively little Federal involvement.

Communities are creating magnet schools emphasizing high standards of achievement in math and science. Private companies are rapidly expanding their collaborative research activities with university scientists. The people are ready for a new national policy on education and research based on the economic well-being of the nation. Indeed, they are already creating that policy by their actions at state and local level.

If the Federal Government is to stimulate rather than obstruct these trends, it will require actions in the Congress and in the Executive Branch based on a consistent and well-informed view of the relationship between education, research, technology, and economic health. Many different committees of the Senate and the House have jurisdiction for dealing with individual parts of this set of inter-related issues. The Budget Committee is in an excellent position to understand the overall puzzle and help other committees put the pieces together in a constructive way.

Let me give you a quick summary of what I believe the major problems are, and then indicate a number of strategies for their solution.

Productivity improvement in America's business and industry depends directly on the quality of the technology used and the level of the education of the people who must develop and employ this technology. Contrary to the impression often left by those who expect to solve all our economic problems with "high tech" industry, technology can be used to reduce waste, increase sufficiency and stimulate innovation in every business activity in our economy, without exception. It must do so, for the time required to transform our economy, structurally, will be substantial. The high technology information systems sector of industry is creating employment and wealth and should be seen as a strategic economic asset of the first order. But the main contribution of the information system industry is to provide the tools and the capabilities throughout our society to increase productivity and innovation everywhere. Thus, the task of the nation's research enterprise and the requirement for a disciplined educated work force cannot be isolated to microelectronic chips and genetically-manipulated living cells. We must upgrade technology capabilities right across the spectrum from agriculture and manufacturing to services.

We will hear a great deal of debate about industrial policy this year. If industrial policy means control by the Federal Government of the allocation of capital and other resources among industrial sectors, I am opposed to it. If it means encouragement of growing sectors of our economy by fine-tuning our existing policies in areas such as R&D, human resources and education, to improve productivity-enhancing capabilities that could spread throughout the economy, then such a policy makes excellent sense. A cornerstone of such a policy would be the identification of weaknesses in our educational system and in the depth and strength of the long-time research from which industrial techrology draws its sustenance.

In these two areas the Federal Government and the states have shared responsibility, with the Federal Government primarily responsible for the support of research. No radical change in this partnership is required. What is needed is a substantial injection of new resources together with orientation of priorities. The President has taken a very important step in the 1984 budget by proposing a substantial increase in the resources that can be made available to university scientists and engineers through the National Science Foundation and other basic research-supporting agencies.

After a decade of severely-constrained growth, the American scientific enterprise finds itself with embarrassingly obsolete facilities. In many cases, it is unable to equip its scientists as effectively as do competing foreign nations. Many fields of research important to modern engineering such as polymer science, the study of ceramic, plastic, or composite materials, or new developments in mathematics are constrained well below the levels needed to keep our industrial laboratories pushing forward as rapidly as they should, to be fully competitive. It is essential that the Congress find the funds to make this expanded investment in our long-range scientific research base. Budget growth will be required for a number of years in order to work on the backlog of obsolescent facilities and equipment that limits both the productivity and the progress of our vital academic research enterprise.

Unfortunately, there is not a strong consensus on how the resource requirements of the educational sector can be met. This problem comes in two parts: higher education and precollege education. On the university level I see two kinds of fundamental human resource problems. First, there are severe supply and demand distortions resulting in inability of the universities to respond to rapidly-growing demand for certain technical skills with advanced degree training. It is a tragic demonstration of the inadequacy of market forces, as a mechanism to insure the right levels of trained manpower that the number of Ph.D. computer scientists graduated each year has actually been declining since 1976. This happened in spite of hundreds of vacancies for professors of computer science in universities, because of unquenched demand for people with A.B. or Masters level these skills in companies large and small in the computer industry and among the customers of the industry who wish to make make optimal use of the new productivity-enhancing information system tools. The solution to this dilemma requires the rapid expansion of university faculties in computer science and electrical engineering, which in turn requires not only fellowship support for students, but the provision of equipment and research support for young faculty so that careers in universities can once again be as professionally attractive as research careers in industry. Until this is done students will continue to leave school to take the vacant jobs in industry, abandoning the opportunity to gain the advanced degree which will permit them to contribute to the highest levels of research and invention, and qualify them to serve on the university faculty where they can train many more people with similar skills.

The second difficulty I see in engineering education relates directly to U.S. industrial productivity and has to do with education for careers in production. Here the problem is, that for three decades, American engineering schools have concentrated on strengthening the scientific base of their curriculum, something badly needed as we learned in World War II when physical scientists rather than engineers invented and designed the radars, proximity fuses, and nuclear weapons with which we won the war. Engineers trained since the war were both educated and motivated to pursue careers in research and development. The factory was not regarded by the universities as an institution offering a technology challenge worthy of their best students.

This condition must be reversed without sacrifice of the scientific sophistication of American engineering, or a reduction in emphasis originality and creativity.

Fortunately, the new technologies such as computer graphic and robotic systems are now attracting large numbers of young engineers and faculty back to the question of design for manufacturability and technologies for efficient production. Overnight there has been a change of attitude in the schools of engineering. They are ready to develop new and stronger curricula and expand their engineering research in areas that will contribute directly to the productivity of American industry. Unfortunately, the federal resources on which universities depend for advanced, technical research and graduate training will not permit as rapid a response to this matter as the overseas competitive challenge, particularly in Japan, merits.

The evidence that supports my belief that American engineering schools would like to move swiftly in this area is the response to an IBM announcement last September that our company would provide $50 million in cash and equipment gifts to selected engineering schools interested in developing programs in the field of manufacturing and design for manufacturability. One hundred and sixty-two schools of engineering responded with proposals for our initial planning grants.

This is an area in which swift action to assist the universities, involving the participation of both Federal agencies and private industry could reap great rewards for our economy. The President's

National Productivity Advisory Committee recommended December 14, 1982 to the Cabinet Council and the President that a Matching Grant Program be established by appropriate Federal agencies to stimulate private sector contributions to engineering schools, enabling them to respond swiftly in the area of manufacturing process and technology.

University-industry research relationships--in which companies share problems and talent, as well as equipment and sometimes money, and help faculty and students get experience with practical problems--are explored in the National Science Board's 14th Annual Report, just transmitted by the President to the Congress. The report's conclusion, which I second, is that collaborative research is a flourishing and especially fruitful form of relationship, with many benefits to the universities and industry alike. IBM alone is engaged in collaborative science and engineering work with universities to the tune of over 435 projects in 150 institutions. And that is in addition to more than $21 million given last year to educational institutions in the form of grants, 120 fellowships, and other forms of financial aid.

Even more serious problems are found in our public schools at all grade levels. I need not recount here the evidence that mathematics and science education in the public schools has deteriorated to an extent that many young Americans are deprived of the education prerequisite to participate in the technical career opportunities being generated in high-technology sectors of the economy.

The National Science Board's Commission on Precollege Education in Mathematics, Science, and Technology has reported its assessment of that situation. Colleges are heavily engaged in remedial education to make up for deficiences in the secondary schools. Secondary schools are frequently unable to find math or science teachers who have studied enough mathematics or science to be certified to teach the subject. Secondary school teaching is no longer attracting the brighter students, and many school systems do not even offer the minimum amount of mathematics and science required for admission into a professional curriculum at the college level. Unless this situation is remedied in communities all over the country, we will limit future opportunity to enjoy the fruits of new and expanding careers to the fortunate few. This would limit the country's capability to the capabilities of a minority of its work force. More than a lagging economy and a falling standard of living is threatened.

Social conflict will surely eventually result from a deprivation of economic opportunity for a substantial part of our population who are subjected to inadequate schooling.

A national consensus has not yet emerged on defining the Federal role for the solution of this problem. Almost all Americans believe in the local control of public schools while recognizing that Federal concerns about national security and competitiveness justify Federal investment in science education. The annual operating cost for these schools is about $100 billion per year. Federal programs expending even hundreds of million dollars a year can hardly be expected to cause a transformation based on the addition of financial resources alone. The Federal Government must identify selected activities of very high leverage through which local communities that understand what is at stake for their children can rapidly improve their schools.

Let me give you an example. Because the Federal Government finances a large part of the nation's scientific research and sustains the nation's universities in research, Federal agencies can and should provide the linkage between the research enterprise and the teachers in our secondary schools. Since these teachers are not participants in the research process, they need specific and concrete help to maintain the currency of their knowledge of science, and they need specific help with materials, curriculum and summertime educational opportunities, so the information they impart to their students is timely, interesting, and relevant.

Another role of the Federal Government is one of national leadership. The President and the Congress can and should articulate the emerging consensus for a national effort at educational and technological revival. In our new-found cynicism about our government we sometimes describe government attempts to exercise leadership without the accompanying expenditure of large sums of money as "jaw boning." In a more innocent time we used to call it statesmanship or leadership. The case for investing in talent and knowledge as the basis for a strong economy is so compelling that it is an issue around which all interest groups at all political parties can join.

Given a strong and vital national technology, based on excellence in research and education, the ultimate economic benfits to the public also require a healthy climate for industry. The President, in his State of the Union Address, emphasized the importance of high-technology growth industry to the solution of our national economic problems and indicated that the growth of these industries needs to be fostered. This will require careful attention to not only the principles of the tax law, but the details of its implementation.

I would call to your attention two examples of actions of the Executive and the Congress that were contrary to this principle.

The first concerns the matter in which the tax compromise of the summer of 1982 affected depreciation schedules for the equipment and facilities of high-technology businesses.

The Economic Recovery Tax Act intended to encourage capital investment by substantially reducing depreciation lifetimes for many categories of equipment and real property. In detail, these benefits went mostly to real estate and industries that normally have long depreciation lives for their facilities. High-technology industry was little or negatively-benefited because our technology moves so fast we already depreciate our equipment over a short, (four- or five-year) period. In the adjustment to the Tax Act of last summer, necessary to help close the budget deficit, these schedules were left alone, but the permissible accelerated rates were altered to freeze depreciation at 150% of the declining balance. This reduced rate, slower than the commonly-used double declining balance, was a temporary feature of ERTA intended to increase revenues and soften the impact on the Treasury of the change in depreciation schedules. The net affect of both features, ERTA and its amendments the following year, was to place high-technology companies that normally depreciate their facilities over short periods in an even more disadvantageous tax situation than they were before the passage of the ERTA. The impact on IBM, for example, will be hundreds of millions of dollars less of annual cost recovery by 1985 or 1986 if this situation is not altered. Other high-technology companies will be similarly affected. I do not believe the Congress intended that the tax law provisions would end up selectively penalizing the high-technology sector.

My second example concerns the details of implementation of the Incremental R&D Tax Credit, that was also a feature of the ERTA. It is nothing less than astonishing that on the very day the President presented his State of the Union message the Treasury Department issued the proposed implementation regulations for the R&D tax credit which cast serious doubt whether or not computer software development could qualify for the incremental tax credit as R&D. We have had a clear indication from the Treasury Department that it is their intention to preclude R&D tax credits for software. Software is the most rapidly-growing segment of the computer industry. Even more importantly, software is delivered by thousands of small firms engaged in a technically-difficult and highly-creative but risky business. It represents an area of the industry in which the U.S. substantially leads its overseas competitors, and it would be tragic to see this vibrant industry of thousands of small firms disadvantaged by the feature of the tax law intended to stimulate just such job-creating, innovative activity.

I use these two examples to emphasize that any discussion of industrial policy--that is, national policies intended to encourage high-technology and growth industries--must get below the level of the philosophical, and must deal with the practicalities of the details of the business environment on a day to day basis. The excellent beginning made by the Congress in the construction of the ERTA needs to be followed up by consistent long-term policy that pays attention to such details.

There is one other point I would like to make on taxes. In the search for additional tax revenues that is sure to occur over the next several years I must strongly recommend against the use of corporate tax surcharges as a means of increasing revenue. This type of tax hits hardest the very corporations or the very firms who are leading our economic recovery and increases the taxes of those already paying the most taxes. I would suggest as an alternative that the Congress seriously consider a minimum corporate tax instead. A minimum corporate tax would spread the corporate tax burden across a much larger corporate base.

In closing, let me note the striking contrast between the current interest in math and science education and in advanced university research versus the wave of public interest following the launching of the Russian Sputnik.

Twenty years ago, the Government responded to an external challenge to the Government's own prestige. The Federal Government launched national programs in both science and education that had great benefits and, in many cases, enduring value. The public understood these efforts as Federal responses to an external threat. I am afraid many communities did not see science education and scientific research as important and meaningful contributions to the life of their community, the opportunity for employment, and the ultimate well-being of their children.

Once it is understood in American communities across the land that a sound education in mathematics and effective access to the latest of scientific research is important to the well-being of the community and not just to some far off Federal project in the military or space field, we will be on the way to the proper realignment of our priorities.

AGRICULTURE

WEDNESDAY, FEBRUARY 23, 1983

U.S. SENATE,
COMMITTEE ON THE BUDGET,
Washington, D.C.

The committee met, pursuant to notice, in room 6202, Dirksen Senate Office Building, at 10:10 a.m., Hon. Pete V. Domenici (chairman of the committee) presiding.

Present: Senators Domenici, Symms, Gorton, Chiles, and Sasser.

Staff present: Stephen Bell, staff director; William Hoagland, senior analyst for agriculture; Richard N. Brandon, minority staff director; and Kenneth Erickson, analyst for agriculture.

OPENING STATEMENT OF CHAIRMAN DOMENICI

Chairman DOMENICI. Mr. Secretary, we ought to have some additional Senators in and out. As you might suspect, you have some competition up here on the Hill today. Rita Lavelle is here, and that is tough competition, as you might suspect.

It is a pleasure to have you here, to welcome you to this committee.

Today is designated by this committee, the entire day, to the issues of agriculture as they might affect the budget. Not only are we asking you to testify, but this afternoon we have the distinguished Governor, the Governor of Nebraska, and we have a number of people who are active in the major associations and groups that are concerned with agriculture in the country.

As you know, we have to prepare our budget resolution and that is difficult because we have to look somewhat out into the future. The agriculture budget estimates, particularly for the agricultural price support programs, are the subject of wide swings in short timeframes. I think you are much aware of that.

HISTORIC HIGH OUTLAYS

A year ago when you appeared, you anticipated that the price support outlays would be about $6.8 billion for the fiscal year. Today it appears that these outlays will reach a historic high, about $18.9 billion, and I am not blaming you for this forecast error.

These short-run shocks in agriculture, it seems to me, are common, and are very difficult to anticipate, but fortunately the budget and appropriations process has remained flexible in dealing with this tremendous area in terms of its needs, especially during this last year.

We will probably never be able to project agricultural price support outlays accurately in the short term, but we can and should be able to come to some consensus. I hope you address that today with reference to long-term trends. It is the long-term trends that should shape our short-run decision on agricultural policy.

Unfortunately, looking at the administration's own budget outlays in terms of projections for farm price support programs over the remainder of the decade, one must conclude that a chronic imbalance, or imbalances, in agriculture are foreshadowed.

When agricultural price support outlays averaged about $3.9 billion over fiscal years 1977 thru 1981, for the period covering fiscal years 1981 thru 1987 the CCC outlays would average about $12.1 billion, even allowing for the PIK program.

I hope that you will address that. We have some charts here which represent our best thinking to this point on these kinds of trends.

LONG-TERM IMBALANCE IN AGRICULTURE

I think the suggested long-term imbalance in agriculture must raise some fundamental questions about how agriculture has evolved and how it relates to domestic production in world markets. A number of bills have already been introduced in the new session of Congress. Some of them have the goal of expanding and subsidizing exports, thereby reducing domestic farm price outlays.

Senator Dole has introduced at least two such bills. I have cosponsored one, and I think there are a number of co-sponsors from this committee.

I think it is of some great concern, as one of our afternoon witnesses has stated, that a majority of interventions in international trade is a consequence of our domestic agricultural and food policies.

I have found this to be true in my own discussions with Japanese and European communities and equally so in our domestic farm programs.

As this committee examines the out-year deficits, we also will have to carefully examine the domestic farm price programs and their impact on international trade and deficit projections. Because agriculture is critical to the entire economy, we have to support policies that maintain U.S. agricultural preeminence in the world. We must be careful to formulate long-term policies that are in the best interests of agriculture and the world economy.

So we look forward, Mr. Secretary, to your testimony on these critical issues.

Senator Chiles, the ranking minority member of the committee will be here. He is engaged for about 45 minutes, but I assume he will be here before we conclude.

Senator Sasser, would you like to make some opening remarks?

Senator SASSER. No, Mr. Chairman. I have some questions of the Secretary, but I will wait until after his statement.

Chairman DOMENICI. Thank you very much, Senator.

Mr. Secretary, you may proceed.

STATEMENT OF HON. JOHN R. BLOCK, SECRETARY OF AGRICULTURE, ACCOMPANIED BY STEPHEN B. DEWHURST, DIRECTOR, OFFICE OF BUDGET AND PROGRAM ANALYSIS, AND WILMER MIZELL, ASSISTANT SECRETARY FOR GOVERNMENTAL AND PUBLIC AFFAIRS

Secretary BLOCK. Thank you, Mr. Chairman.

I am pleased to be here and I must concede that it doesn't break my heart that there is a lot of competition this morning. Clearly only my real fans are here today to hear the testimony about the Department of Agriculture, some of the problems that we are up against.

I have with me Assistant Secretary Mizell to my rear, and to my right, the Director of our Budget, Steve Dewhurst, to help me through the testimony today.

With your permission, I will submit the statement for the record and make a few general comments after which I will be pleased to respond to your questions.

Chairman DOMENICI. Your statement will be made a part of the record.[1]

Secretary BLOCK. Thank you.

AGRICULTURAL SITUATION

Mr. Chairman, we know that conditions in agriculture during the past 3 years have not been the most favorable. Prices for major crops in 1982 were at their lowest levels since 1978. As a result of record production in this country and weak demand abroad, there were depressed prices for many commodities. Production costs were increasing because of double-digit inflation rates and interest rates, which had risen to record levels.

With conditions like this it is no wonder farmers have been under pressure. However, we do believe that the framework has been set for recovery in the agricultural sector.

The administration's economic policies have succeeded in reducing inflation to below 4 percent in 1982. Indeed, farm inflation, we think, this year may be as low as zero to 2 percent. Interest rates have declined dramatically and should continue to decline.

We have taken several actions to reduce 1983 crop appropriation, including the land diversion program and the payment-in-kind program. We have instituted innovations on the export front to help increase demand for our products.

PAYMENT IN KIND

We feel the payment-in-kind program holds particular promise for the current situation. It will reduce excessive stock while providing adequate supplies for domestic consumption and world trade, support farm income and has prospects for future market-led recovery.

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[1] See p. 341.

EXPORT CREDIT

I would like to briefly mention our latest export program announcements. As you know, the President announced on January 11 a major increase in this year's blended credit program. We have been pleased with the response to the blended program. This relatively small cost will be recovered when the loans are repaid.

With other recent announcements concerning the sale of wheat flour to Egypt at competitive prices, this will be the first step at reestablishing ourselves in this important market.

FARM CREDIT

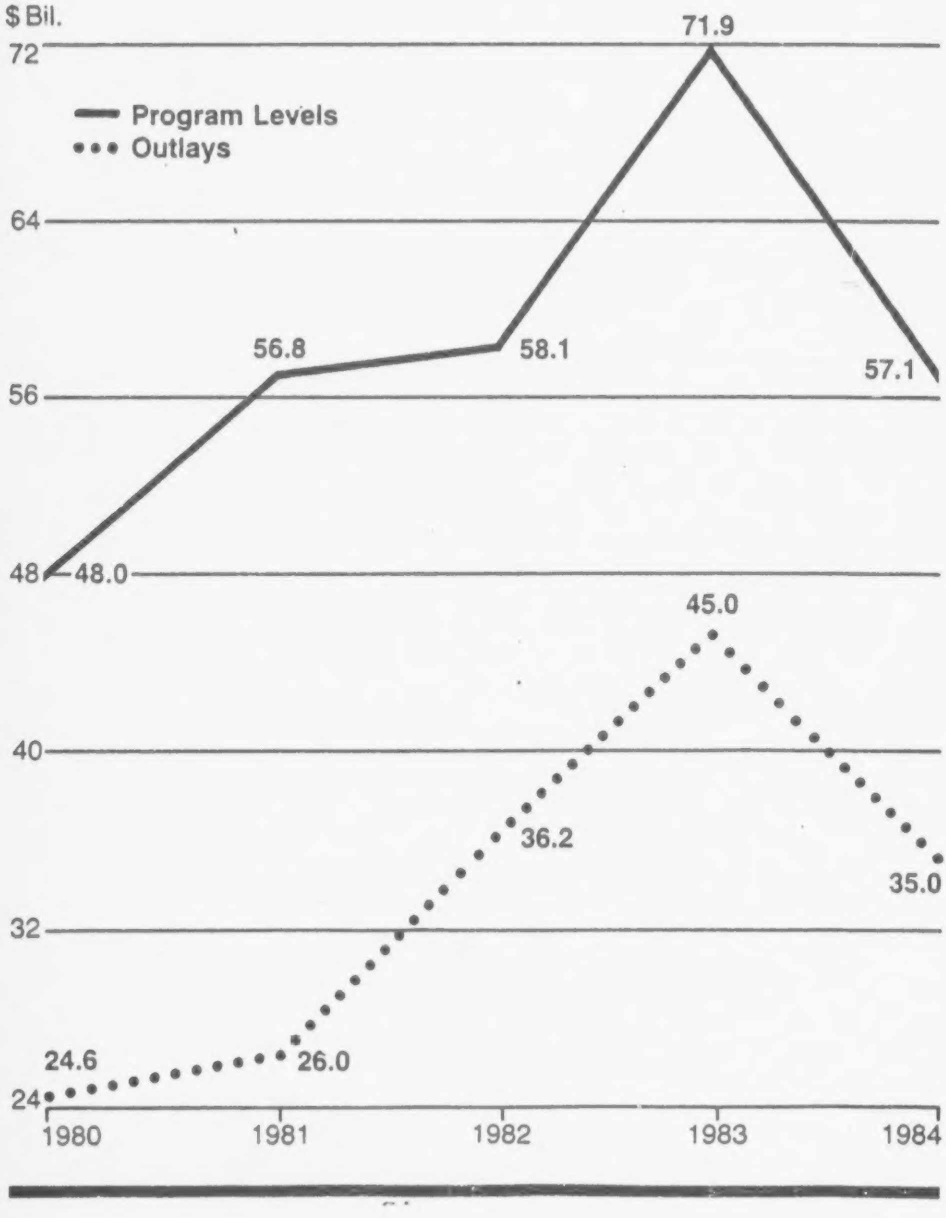
Let me turn now to the farm credit situation. Despite the attention given to farm foreclosure sales given by the media, we must recognize that the vast majority of farm borrowers are meeting their obligations. Credit conditions are improving. Interest rates have declined and adequate credit is available from rural banks and so forth.

I have been meeting with representatives of the farm credit system from the American Bank and Independent Banking Associations and talked to them about the situation. We have once again committed ourselves to work closely together to help producers through the tight pinch that they are in today.

Close to half of all farmers remain debt free. Another one-fourth have debt/asset ratios of less than 20 percent. That is low relative to other sectors of the economy. Another one-eighth have debt/asset ratios of from 20 to 40 percent. They are in a relatively secure position. This means about one-eighth of the farmers are financially vulnerable.

As instructed by the President, we will continue to work individually with farmers with debt problems to help them through these tough times. Certainly, as you are aware, he brought that up in his state of the Union address. Every effort will be made to stay with farmers who can be helped by Farmers Home Administration supervision. However, we should recognize that not all farmers can stay in business in 1983 and a blanket moratorium would not solve the problem. It would endanger the rural lending institutions.

USDA Program Levels and Outlays



USDA PROGRAM LEVELS

I have a chart here for fiscal 1984 for total values of goods and services provided by the Department of Agriculture. It is estimated at $57.1 billion, and outlays associated with this program level are estimated at $35 billion. You can see it has come down from the 1983 program level of $71.9 billion. We will explain a little bit more about how it has come down.

Both these numbers represent slightly less than a 20-percent reduction from the record levels of $72 billion and $45 billion for this year, 1983.

Reductions affect many programs and we will go to another chart.

Major USDA Program Level Changes FY 1983—FY 1984

($ in Millions)

CCC Commodity Programs	−6,866
FmHA Housing Loans	−3,015
Export Credit Guarantees	−1,800
REA Electric Loans	−1,715
Food Stamp Program	−1,089
Other	−297
Total Changes	−14,782

Here is a layout of the reductions, Commodity Credit Corporation programs, $6 billion; farmers home, $3 billion; export credits, $1.8 billion; REA, $1.7 billion; food stamps, $1 billion, and others. I will talk about these a little bit as I proceed with my testimony.

Each program area of the Department was reviewed extensively in our desire to balance resource needs with the overriding concern to bring the Federal budget under control. I will discuss these program changes one at a time.

AGRICULTURAL RESEARCH AND EXTENSION

The first one, agriculture research and extension, maintaining the quality of agriculture research and extension. This has been and continues to be a priority goal of this administration.

However, the need to restrain Federal spending means that even highly desirable programs will have little or no growth in 1984. We, therefore, provided a very small increase for the agricultural research service. We have maintained the key formula programs of the cooperative State research service and the extension service at the fiscal 1983 level and added a basic animal research program.

EARMARKED PROGRAMS

Earmarked programs are reduced. That is where the saving is, in the earmarked programs. In the animal plant health inspection service we continue to propose shifting the emphasis in the Brucellosis program from eradication to control. I would emphasize that we are committed to the long-term quarantine and inspection programs to protect our agriculture industry from diseases and pests.

BLENDED CREDIT

We are proposing a $10.3 million increase in the foreign agricultural service. As I noted earlier, we are operating a new blended credit export program which was announced last October.

This program combines direct Government credit at zero interest with Government-guaranteed private loans and commercial interest rates to produce an attractive low-cost financial package.

This program is directed and targeted toward developing countries. The initial program of $500 million was extremely successful. In just over 2 months all of the funds were committed and, as a result, on January 11 the President announced that an additional $1.25 billion in blended credits will be available this year.

In fiscal year 1983 we expect to guarantee at least $3.4 billion in commercial credit in addition to the $1.4 billion of loan guarantees included in the blended credit program.

Thus, total guaranteed credits will be at least $4.8 billion. The total export credit level, guaranteed and direct, will be over $5.1 billion.

I might bring to the committee's attention that when I arrived as the Secretary of Agriculture, the money available through these credit programs was $2 billion. We are now looking at $5.1 billion this year, which is an indication of the aggressive effort we have made to make credit available in order to move our products to other countries.

In fiscal year 1984 we expect the world economy will be well on the way to recovery, and perhaps a less ambitious export credit program may be appropriate. That explains the reduction in the chart.

GUARANTEE AND DIRECT CREDIT

At this time we plan to make available at least $3 billion in guarantees, and $100 million in direct credit. May I assure you that actual credit levels will depend on the need to enhance exports during fiscal year 1984.

COMMODITY CREDIT CORPORATION

The Commodity Credit Corporation outlays will drop from $18 billion in fiscal year 1983 to $9 billion in fiscal year 1984. We do need the urgent help of Congress to provide adequate financing to assure that CCC can continue to carry out its responsibilities. We are requesting in a supplemental appropriation for fiscal year 1983, $5.7 billion to reimburse the CCC for its fiscal year 1983 losses. In fiscal year 1984 we are requesting $10.2 billion to reimburse the CCC for projected losses.

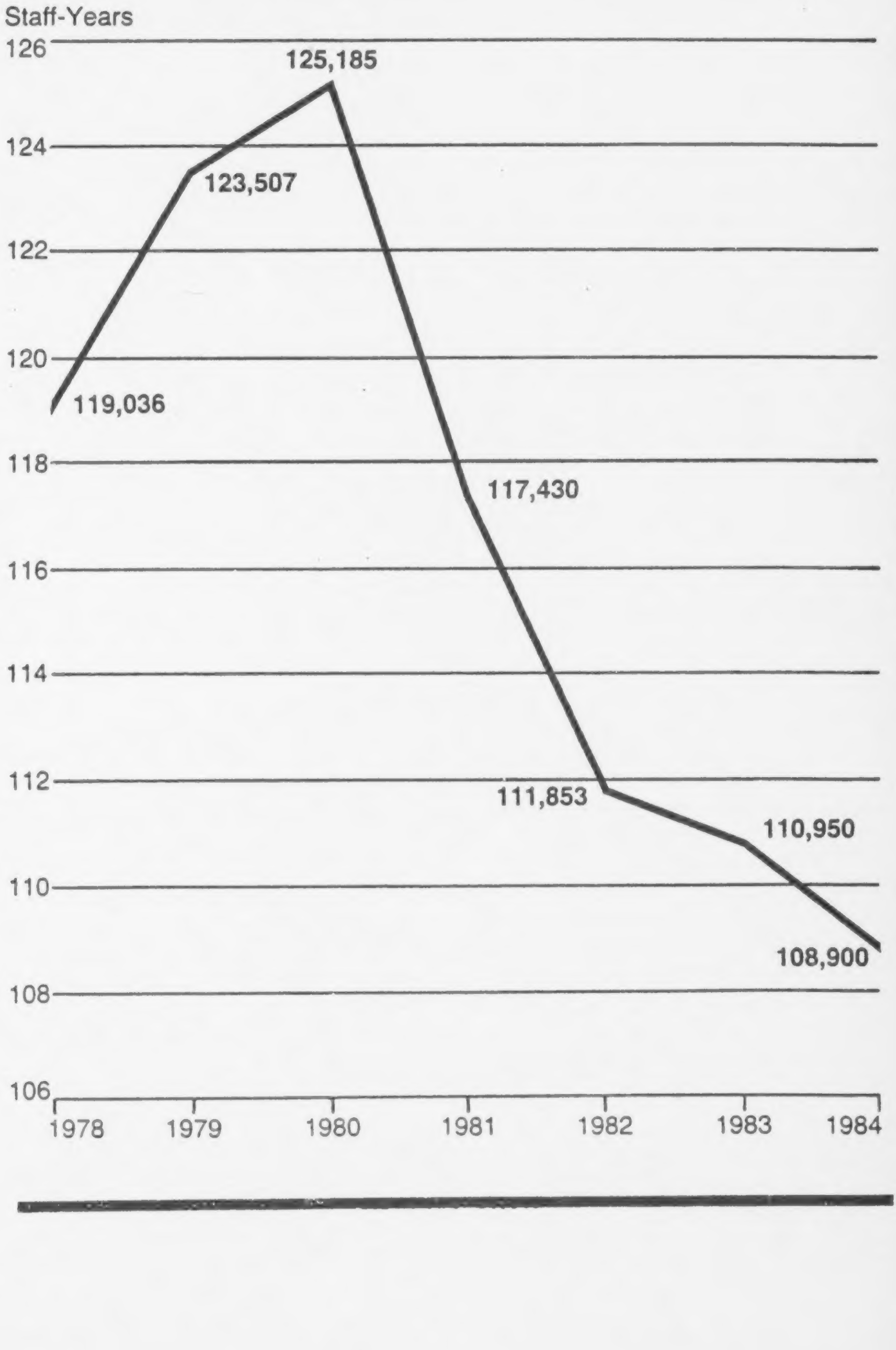
FARM OPERATING LOANS

The Department of Agriculture will continue to be a significant supplier of credit to rural America. Farm loans will continue at about $4 billion in fiscal year 1984, and as in the past 2 years, we will increase our emphasis on farm operating loans. The emphasis will be on those loans.

I might also add that we are adding personnel to our Farmers Home Administration offices to facilitate the handling and supervision of these loans. We have been short of personnel and we are going to be adding there.

I want to show you a chart which indicates USDA staff years. We are adding personnel in FmHA offices because we are prioritizing the Farmers Home lending responsibilities. The Department of Agriculture's total staff years has come down from 125,000 in 1980 to 117,000 in 1981; down to 111,000 in 1982 in 1983, 110,000; and in 1984 we are looking at about 108,000. We are getting control of the growing number of employees and the size of Government a little bit. We are prioritizing where we think the need is greatest.

USDA Employment Staff-Years



Rural community development loans will be reduced primarily by terminating the business and industry loan program. Rural electric and telephone loans will be reduced to a level of $4.1 billion.

RURAL HOUSING BLOCK GRANT

Rural housing programs will be consolidated by creating a State-administered housing block grant program. The block grant program, which is budgeted at $850 million for fiscal year 1984, will make better use of limited Federal dollars and reduce the long-term debt.

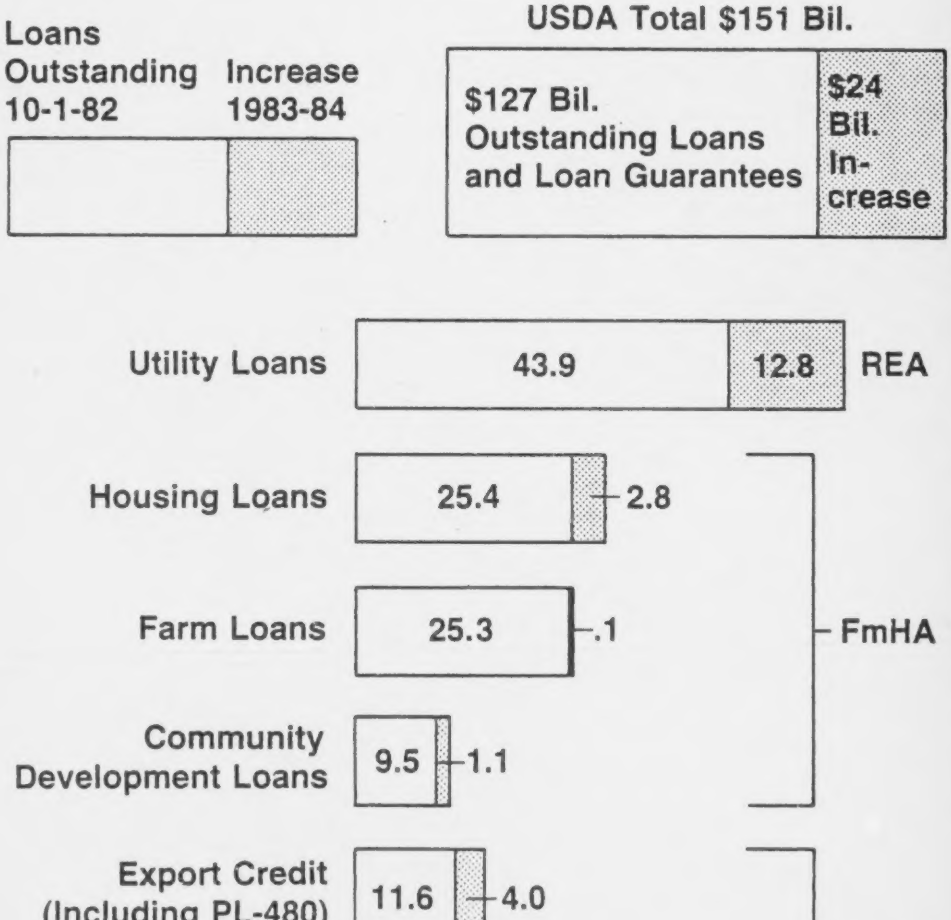
Even with these belt-tightening measures, the total credit to rural America is estimated to reach $146 billion by the end of fiscal year 1983 and $151 billion by the end of fiscal year 1984. This means it is going from $127 billion at the end of 1982 on up to $151 billion, which is a big increase.

OUTSTANDING LOANS AND LOAN GUARANTEES

I want to show you this chart on the distribution of outstanding loan guarantees to rural America. You always hear that we are not doing enough, but I would just point out the amount that we have out. Up to fiscal year 1983–85 it was $127 billion in total outstanding loans, and in fiscal year 1983 and 1984 we are looking to add $24 billion on top of that. That is a very big increase, going on up to $151 billion.

Distribution of FY 1984 USDA Outstanding Loans and Loan Guarantees

($ in Billions)



That suggests that whomever says we are not making more money available and lending the helping hand here to rural America fails to look at the figures.

Utility loans increased $12.8 billion, housing loans increased $2.8 billion. That is deceptively low for farm loans because it provided for the rolling over of a lot of loans. There are short-term loans, most of them just for a year, and right now, as you may expect, producers are just rolling them over. They don't have money to pay them off and very few people come in with new loans.

Community development loans increased $1.1 billion, export credit increased $4.0 billion and commodity loans, $2.5 billion.

If you want to look at any of these charts again or call attention to them, we will pull them back up later on.

Chairman Domenici. Mr. Secretary?

Secretary Block. Yes, sir.

Chairman Domenici. Just a brief question.

FMHA LOAN PROGRAMS

With reference to Farmers Home loan programs it was common knowledge, that while the programs are really supposed to be directed at rural America and agriculture, for a period of time financing was being used for such things as motels, business establishments, and so forth.

What have you done with reference to that?

Secretary Block. We have tightened the program regulations to insure that this money is used for projects that contribute to the economic stability of rural America. We had complaints of money being spent for swimming pools and golf courses. There are greater needs in this country than that, and we have eliminated these types of loans.

Chairman Domenici. So your State offices have been instructed that they are not to make those kinds of loans?

Secretary Block. That is right.

In fiscal year 1984 we have requested no funding for business and industry loans. In fiscal year 1983 we have some funding, but as I have said, we are screening those carefully to stay away from those low priority kind of loans. But in fiscal year 1984 we would eliminate the program.

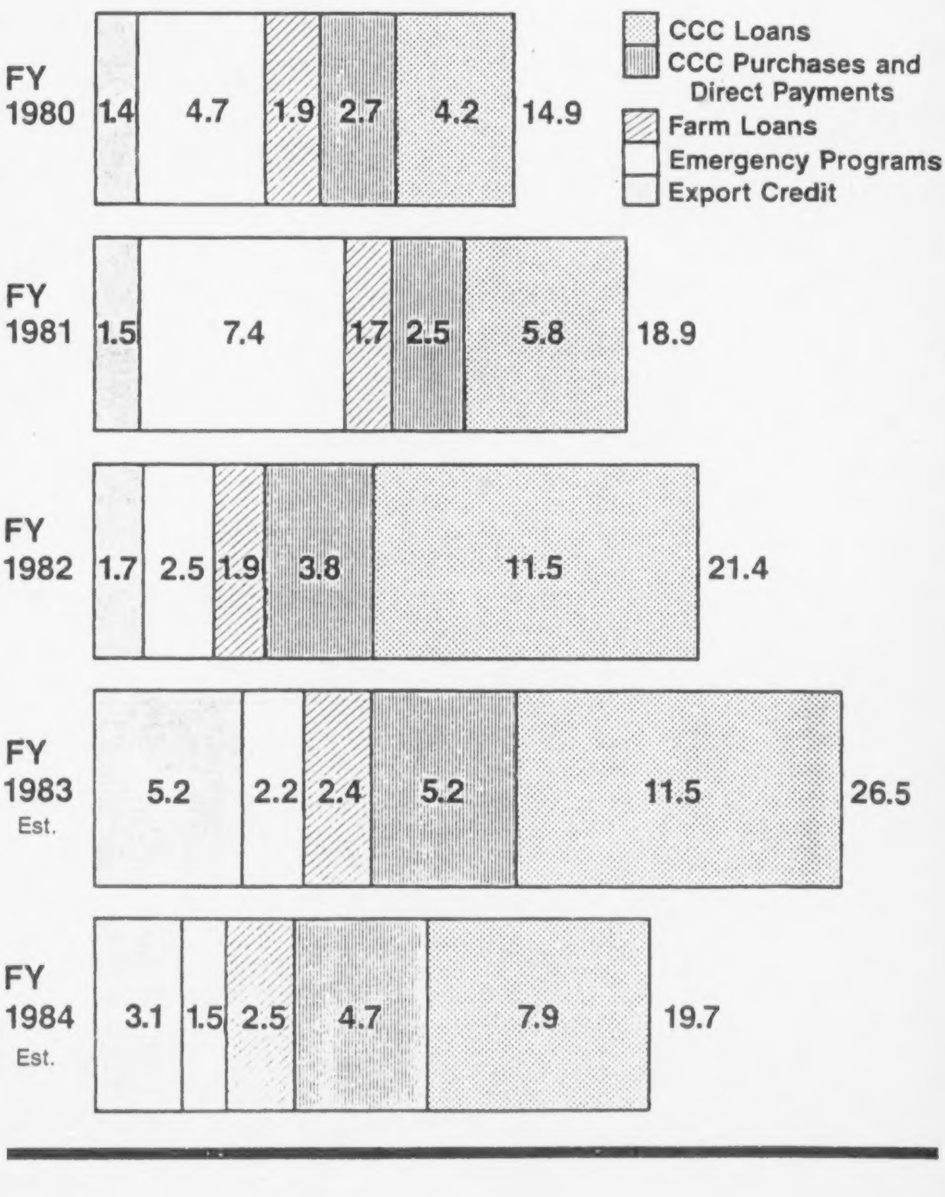
Chairman Domenici. You may proceed.

ASSISTANCE TO FARMERS

Secretary Block. I only have one more chart. This chart explains in greater detail the assistance to farmers each year.

Assistance To Farmers FY 1980-1984

($ in Billions)



As you can see, these are the commitments made. In fiscal year 1980 the commitment was $14.9 billion; in fiscal year 1981, $18.9 billion; in fiscal year 1982, $21.4 billion; and in fiscal year 1983, $26.5 billion, and we are looking at the reduction in 1984.

The right column reflects Commodity Credit Corporation loans on commodities primarily, and then there are the purchases and direct payments. The purchases would be the purchases of dairy products—that is the second column from the right—or direct payments, which would be the target price payments, the deficiency payments.

Farm loans are in the center column. Emergency programs are in the second column from the left.

We are looking at phasing down loan and grant programs as the Federal Crop Insurance program comes on the line. For export credits, you can see how they are going to be very large this year.

SOIL AND WATER CONSERVATION

The funding for Soil and Water Conservation activities in fiscal year 1984 is proposed at $694 million. Budget constraints make it necessary to recommend a funding level that is 6 percent less than the minimum RCA program projection.

The department's ability to provide technical assistance for conservation activities is unimpaired. I want to point that out.

We have a high priority for soil erosion and for controlling this problem. Where the money is saved is in planning and implementation of stream and flood control activities. We think this is an area where we can save some money for a year or two while the budget is very tight.

Targeting of technical assistance to critical areas has proven to be very effective, and we will be increasing targeting. In fiscal year 10 percent of our program will be targeted to areas where we have the greatest problem with soil erosion.

We are requesting substantial reductions in small watershed planning. That is where we are going to save some money. Also we recommend a reduction in the agricultural conservation program and related cost-share programs.

TIMBER PROGRAM

For the Forest Service, there is a 6-percent reduction in program funding. However, if the sharing of receipts from timber and other areas is continued, the total expenditure will increase by 1 percent. In fiscal year 1984 there is a 4-percent increase in the timber program and a 26-percent increase in the minerals program.

We also have under development a legislative proposal to propose an increase in user fees to bring in an additional estimated $25 million.

Forestry is a reduction of 60 percent for fiscal year 1983 appropriation.

NUTRITION PROGRAMS

For the domestic feeding programs several proposals are being made. These are aimed primarily at program simplification and the reduction of waste, fraud, and abuse. The cost-of-living increases are also being temporarily deferred in line with the President's announcement. These proposals are consistent with the dual objectives of fiscal restraint while responding to the needy.

The child nutrition programs are funded at $2.9 billion in fiscal year 1984. The department is proposing a general nutrition assistant grant to replace the child care program and the school breakfast program. This would be funded at 85 percent of what these programs would have received in 1984, and would save $313 million in fiscal year 1984.

In the food stamp program the administration is requesting a $1.2 billion supplemental in fiscal year 1983 to assure that adequate funds are available for the rest of the year.

For 1984 the administration's proposals are intended to simplify program administration and increase the responsibilities of State and local governments for the accuracy of their certifications. This includes making States liable for all erroneous certification errors exceeding 3 percent of total issuances.

Also we are proposing legislation which would require States to operate a program which would require the receipt of food stamp assistance with the opportunity to work.

The special supplemental food programs for women, infants and children, the special milk program and the food donation programs will all be carried out at essentially the fiscal year 1984 resource levels of $1.2 billion.

I have discussed many of the legislative changes that we are proposing in support of the fiscal year 1984 budget, and a more complete listing of these proposals is submitted for your information.

I appreciate the opportunity, Mr. Chairman, to appear before you, and we look forward to answering your questions.

Chairman **Domenici**. Thank you very much, Mr. Secretary.

Statement
By
Secretary of Agriculture John R. Block
Before
Senate Committee on Budget

Mr. Chairman and members of the Committee, I am pleased to appear before you to discuss the programs of the Department of Agriculture and our fiscal year 1984 budget proposals.

During the past two years, I have been very gratified to note the public's growing awareness of the broad role that agriculture plays in the many aspects of our daily life. We all have a stake in seeing that our policies and programs continue to assure that our agricultural system remains the most effective and efficient in the world. Farmers need strong markets and adequate financing at reasonable interest rates. Consumers all over the world need assurance that we will be able in the future to provide plentiful food which many take for granted today. The disadvantaged in our society need help in meeting their essential needs during these difficult times. And ultimately, our Federal taxpayers need to be assured that Government actions to help achieve these objectives involve the minimum possible cost.

The Congress and the Department have worked closely together to meet these key national objectives in light of very adverse conditions. In recent years, the agriculture industry has had to endure a grain embargo and restrictive foreign trade policies with their attendant loss of markets. Everyone has been affected by soaring inflation, interest rates, and increased Government spending. Farmers have been particularly hard hit because the combination of weak domestic and foreign markets and crop surpluses generated by two excellent growing seasons in a row have served to depress prices for many commodities.

But I am optimistic for the future of the agricultural sector. Inflation is down substantially. Interest rates are also down and, as the President has said, there is room for further reductions. Economic recovery is on the way. We have legislation in place to protect farmers against extremely low prices. And with the implementation of our new programs to reduce production and excessive stocks, I am confident that we can bring supplies more in line with demand.

The needs and goals of the Nation and of rural America and the agricultural sector must be addressed in the context of our national objectives of a permanent recovery in employment, production and investment. Reductions in Federal budget deficits are absolutely essential to reach these objectives. The Department's fiscal year 1984 budget and legislative proposals reflect these overriding concerns. Our budget will allow us to fulfill our responsibilities to our constituents. Yet, it is balanced with the need to spend public money wisely.

Before I describe our fiscal year 1984 budget proposals for the Department of Agriculture, I would first like to discuss the current agriculture and farm credit situation.

Current Agricultural Situation

As noted, American farmers are operating under a severe financial strain since prices for major crops in 1982 were at their lowest levels since 1978. A number of forces have combined to bring about the current situation. World grain production, which rose four percent in 1981/82, rose a further three percent in 1982/83, topping 1.5 billion metric tons. World soybean production increased seven percent from 1980/81 to 1981/82, and increased another 12 percent this year. Cotton production decreased five percent in 1982/83, largely due to a decline in U.S. production.

In the face of these ample supplies, demand has grown very slowly. The world is in the grips of a recession. Industrial market economies barely grew last year, and the U.S. economy declined. Developing countries, which offer the greatest potential for export development, experienced growth of only about two percent in 1982, well below that experienced in recent years. Other factors damaging U.S. exports are the financial instability of some of our customers, the strong U.S. dollar, losses related to political tensions, and unfair trade practices by our competitors.

Domestically, the weak economy and growing unemployment have dampened demand for meat, translating into weak demand for feed grains.

Taken together, the large supplies and weak demand have boosted stocks to levels far above any experienced in recent years. Because the U.S. is often the residual supplier and the holder of large supplies of commodities, our burden has grown out of proportion to that of other countries. For example, world grain stocks at the end of 1982/83 are expected to be more than 260 million tons, or 20 percent, above last year's ending stocks. The U.S. will add to stocks nearly 46 million tons more grain and hold nearly 60 percent of world grain stocks by the end of the 1982/83 marketing year. This means that other countries are actually expected to decrease stocks, while our farmers absorb all the shock of the entire world marketing system. In soybeans and cotton, the situation is similar. Of the projected four million ton increase in soybean stocks, 3.3 million tons will be in the U.S.; U.S. cotton stocks will increase by 1.8 million bales while world stocks increase by only 1.3 million bales. Under these circumstances, it is no surprise that prices and farm incomes continue to be depressed.

There have been a few bright spots recently, however, and I am confident that they will grow in the near future.

This Administration has succeeded in reducing inflation down to the lowest level in recent years -- going from double digit levels to four percent in 1982. Interest rates have also declined substantially. The decreasing inflation and interest rates kept farm production cost increases in 1982 to very low levels.

Another relatively bright spot was that livestock producers have faired better than expected.

In 1983, we expect the picture in the agricultural sector to steadily improve. We believe that general economic conditions, both at home and abroad, will be somewhat better, as policies to promote a sustainable recovery take effect. Inflation rates should remain low and interest rates should continue to decline.

It is unlikely that gains in exports in the near term will return to the expansion course of the 1970's. Food grain exports, especially, are likely to remain steady, as world-wide wheat growing conditions for 1983 are favorable, and developing countries' ability to pay for imports will remain limited.

Domestically, although livestock numbers are down and feed is relatively cheap, producers are not likely to significantly expand herds in 1983. It will take some time to gain financial strength to support such an expansion. Therefore, livestock and meat prices should strengthen moderately this year. Feed use is not expected to change much.

Without prospects for a dramatic turnaround in exports or the livestock industry, it became apparent late last year that an ambitious, innovative program would be necessary to prevent further deterioration in the agricultural sector in 1983. Therefore, in addition to the acreage reduction (ARP) and land diversion programs (LDP) announced for the 1983 crops, the President announced on January 11 a payment-in-kind (PIK) program. Participants in the PIK program will receive grain that is under loan or in CCC stocks in return for reducing acreage beyond the levels called for in the ARP and LDP. The goals of this program are to reduce excessive stocks while providing adequate supplies for domestic consumption and world trade, and to support farm income and enhance prospects for a future market-led recovery.

With the PIK program, commodity prices may not increase significantly in the near term, though they should firm. We expect the longer term economic outlook to improve as a result of bringing supplies more in line with demand. The reduction in stocks will provide a potential for price recovery as the general economy improves.

In an effort to meet foreign competition and maintain market share during this transitional period, we have embarked upon an aggressive new export credit program. This "blended credit" program should help to maintain and expand our markets, especially in key developing countries.

We are also continuing to work hard on other avenues to promote exports. Recently, I announced that one million tons of flour will be sold to Egypt. We are also continuing our efforts to lower trade barriers to the Japanese market and gain the cooperation of the European Economic Community (EEC) in defining acceptable trade practices.

All these efforts are not a short term panacea to the problems farmers face, but taken together they give farmers hope that prices will strengthen in the future.

Farm Credit Situation

Three years of depressed farm income are obviously having an effect on farmers' ability to meet their financial obligations. Attention given by the news media to recent farm foreclosure sales provides visible evidence of the problem. There is also statistical evidence of increased delinquency rates and other indicators of financial distress.

However, we must recognize that the vast majority of farm borrowers are meeting their loan obligations, and can obtain the credit they need from private sources. For these borrowers, credit conditions are improving. Loan-deposit ratios of agricultural banks continue to decline, indicating that these banks have reserves sufficient to provide for increased loan activity. Farm Credit System banks also have the capacity to provide additional credit. Furthermore, interest rates have declined several percentage points from the record high levels of a year ago.

The overall debt-asset ratio for the farm sector has increased, but still remains low -- about 20 percent -- relative to other sectors of the economy. This ratio reflects estimates of $215 billion in farm debt and $1,070 billion in farm assets. Although it is somewhat higher than the 16 percent ratio of the late 1970's, when inflation-fueled increases in land values encouraged excessive borrowing, it is still a healthy ratio.

Land values have declined over the last two years. Land and other real estate assets are currently valued at about $790 billion, or close to three-fourths of total farm assets. The value of these assets should remain stable over the next few years.

It is also important to note that close to half of our farmers remain debt free. Of those farmers who do borrow, about half have debt-asset ratios of less than 20 percent and about one-fourth have ratios between 20 and 40 percent. These farmers are in a relatively secure financial position.

The payment-in-kind program should help reduce the credit needs for some farmers and the crop insurance program will continue to provide farmers with the opportunity to protect themselves against production losses.

Now, let me talk a little more about those farm borrowers who are in real trouble. Their problem is of foremost concern to us. As instructed by the President, we are working and will continue to work individually with farmers with debt problems to help them through these tough times.

Traditionally, the Farmers Home Administration (FmHA) has been the "lender of last resort" for farm borrowers who could not obtain sufficient credit from private lenders. Because many of these borrowers started with limited resources or came to us after sustaining a loss due to natural disaster, it is not surprising that they are having an especially difficult time in coping with the economic slump of the last three years. At the end of fiscal year 1982, about one-fourth of FmHA's farm borrowers were delinquent. The total outstanding debt owed to FmHA by these borrowers exceeded $9 billion. The total amount of delinquent payments is about $2.7 billion.

Delinquencies on farm loans held by private lenders are averaging about 4 percent, which is considerably less than the rate on FmHA loans. However, based on a combination of factors private lenders are reporting that from 5 to 10 percent of their borrowers are financially vulnerable. Some portion of these borrowers will undoubtedly seek FmHA loans if denied additional credit or are asked to liquidate by their private lenders.

Let me emphasize that every loan application will be considered on its individual merits by persons familiar with individual circumstances. We will continue to deal with applicants on a case by case basis, and continue to offer subordinations, deferrals, rescheduling, and reamortizations where necessary to assist our borrowers. Over the past year such assistance has been provided to over 40,000 of FmHA's 270,000 farm borrowers. Every effort will be made to stay with borrowers who can truly be helped through FmHA loan assistance and supervision. Generally, the criteria will continue to be that borrowers have made good faith efforts to repay, that they practiced good management, and that they properly maintained loan security.

I have ordered every FmHA county supervisor to personally discuss credit needs and to work out solutions at the grassroots level with local banks, Production Credit Association officials, and other private lenders. These efforts will build on the close contact that we have maintained among our lending institutions at the national level. I have authorized a significant increase in FmHA field staff to assure that we have the personnel to do this job.

Despite these efforts, we must recognize that maybe not all farmers will be able to stay in business in 1983. While the situation is not as bad as some suggest, we recognize that the pain is no less for those who will have to quit. The farm audiences I have talked to over the past several months seem to understand that the Federal Government is doing everything it can. They also seem to realize that blanket loan moratoriums would not solve the problem, and would probably worsen it by jeopardizing the viability of agricultural lending institutions.

Let me turn now to the Department's budget proposals for fiscal year 1984.

Fiscal Year 1984 Budget Proposals

For fiscal year 1984, the total value of the goods and services provided by the Department of Agriculture is estimated at $57.1 billion. Outlays associated with this program level are estimated at $35 billion. Both of these numbers represent slightly more than a 20 percent reduction from the record levels now estimated for fiscal year 1983 of $72 billion and $45 billion for program level and outlays, respectively. The reductions affect many programs. In fact, each program area of the Department was reviewed extensively in our desire to balance resource needs with the overriding concern to bring the Federal budget under control.

Each Committee member has been provided with a copy of our budget summary which describes the budget proposals in detail. I would like to discuss a few of these items at this time.

Maintaining the quality of agricultural research and extension has been and continues to be a primary goal of this Administration. However, the need to restrain Federal spending means that even highly desirable programs will have little or no growth in fiscal year 1984. We have provided a very small increase for the Agricultural Research Service, maintained the key formula programs of the Cooperative State Research Service and the Extension Service at the fiscal year 1983 level, and added a basic animal research component to the Competitive Grants program. We have proposed reductions in a number of earmarked programs because we believe that in a tight budget it is best to give our cooperators maximum possible flexibility in allocating the available funds.

In the Animal and Plant Health Inspection Service, we continue to propose shifting the emphasis in the brucellosis program from eradication to control. This will save the Government nearly $33 million in fiscal year 1984. The infection rate is currently running at less than one-half of 1 percent and annual Federal appropriations exceed losses to the industry by more than two to one. However, I want to emphasize that we are committed to the long-term continuation of essential quarantine and inspection programs to protect our agricultural industry from diseases and pests.

Expanding the export of U. S. agricultural commodities also continues as a priority of this Administration. In the State of the Union message, the President discussed a broader strategy for international trade, one that increases the openness of our trading system and is fairer to American farmers and workers in the international marketplace. The market intelligence and market development efforts of the Foreign Agricultural Service (FAS) are critical to the success of this effort. We propose an increase of $10.3 million for FAS in fiscal year 1984. This will provide for an increase in the market development function as well as the maintenance of FAS intelligence and analysis activities. We are continuing to shift our market development activities to those countries and commodities that have the greatest growth potential.

The trade strategy also includes adequate export financing to sell American products overseas. In October, I announced a new "blended credit" export program. This program combines direct government credit, at zero interest, with government-guaranteed private loans at commercial rates of interest, to produce an attractive, low-cost financing package. The program is targeted at developing countries. The initial program of $500 million was extremely successful -- in just over two months, all of the funds were committed. They will be used to export 3.0 million metric tons of grains, soymeal and vegetable oil, and 200,000 bales of cotton. As a result, on January 11, the President announced that an additional $1.25 billion in blended credits will be available this year.

In fiscal year 1983, we also expect to guarantee at least $3.4 billion in commercial credit in addition to the $1.4 billion of loan guarantees included in the blended credit program. Thus, total guaranteed credits will be at least $4.8 billion; the total export credit level, guaranteed and direct, will be over $5.1 billion.

In fiscal year 1984, we expect that the world economy will be well on the way to recovery and that a less ambitious export credit program may be appropriate. At this time, we plan to make available at least $3.0 billion in guarantees, and $100 million in direct credit. Let me assure you, however, that actual credit levels will depend on the need to enhance exports during fiscal year 1984. We will respond as circumstances develop. We will also make available at least an additional $75 million to $90 million for direct export promotion activities, as yet unspecified, as required by the Omnibus Budget Reconciliation Act of 1982, and we will finance almost $900 million of concessional sales under Title I of P.L. 480. We are prepared to tailor our programs to meet the needs of the world economy and the unfair trade practices of other countries.

We do need the urgent help of the Congress in providing adequate financing to assure that the Commodity Credit Corporation (CCC) can continue to carry out its responsibilities. CCC outlays for fiscal year 1983 are projected at $18.3 billion. With this level of activity, even the recent injection of $10.5

billion provided by the fiscal year 1983 Agricultural Appropriations Act will soon be exhausted. We are requesting a supplemental appropriation for fiscal year 1983 of $5.7 billion to reimburse the CCC for its fiscal year 1983 losses. This help is urgently needed.

In fiscal year 1984, CCC net outlays are projected at $9.3 billion. As always, this is a very tentative estimate. It is contingent upon more normal growing conditions, implementation of our acreage reduction and PIK programs, continued efforts to reduce the cost of the dairy program, and Congressional approval of a number of legislative proposals including freezing target prices. Overall, the 1984 outlay estimate is $9 billion below fiscal year 1983 and $3.1 billion below what these programs would cost without PIK and the changes we are recommending. Our fiscal year 1984 request includes $10.2 billion to reimburse the CCC for its projected 1984 losses to ensure we have sufficient capital to operate our programs.

In addition to CCC activities, the Department of Agriculture will continue to be a significant supplier of credit to rural America. Farm loans offered through FmHA will continue at about $4 billion in fiscal year 1984 and, as in the past two years, we will increase our emphasis of farm operating loans. Rural community development loans will be reduced, primarily by terminating the business and industry program. Rural electric and telephone loans will be reduced by $1.9 billion to a level of $4.1 billion. Rural housing programs will be consolidated by creating a state-administered housing block grant program. The block grant program, which is budgeted at $850 million for fiscal year 1984, will make better use of limited federal dollars and reduce long-term budget commitments.

Even with these belt tightening measures, total outstanding credit to rural America is estimated to reach $146 billion by the end of fiscal year 1983 and $151 billion by the end of fiscal year 1984.

The President's statement of policy and the Department's program for soil and water conservation activities were sent to Congress on December 21, 1982. The Resources Conservation Act (RCA) policy statement and program are based on extensive surveys and evaluations of soil and water resources and will serve as a basis for the Administration's budget and program policy recommendations for the next several years.

The key features of the program include: (1) assigning highest priority to reducing soil erosion, upstream flooding and water conservation where the long-term productivity of agricultural land is threatened; (2) targeting Federal assistance to geographical areas where there is a concentration of critical problems affecting soil productivity; and (3) encouraging state and local governments to accept greater responsibility for resource problems.

Total funding for soil and water conservation activities in fiscal year 1984 is proposed at $694 million. Budget constraints make it necessary to recommend a funding level that is 6 percent less than the minimum RCA program projection.

However, the Department's ability to provide technical assistance for conservation activities is unimpaired.

The $475 million proposed for the Soil Conservation Service (SCS) includes a small increase for conservation technical assistance. Targeting to critical areas has proven to be very effective and will be increased in fiscal year 1984 to 10 percent of the program. The presence of technical experts in the right place at the right time is often crucial to successful conservation efforts. There are substantial reductions in small watershed planning and construction, primarily for fiscal policy reasons. The Administration continues to recommend termination of the Resource Conservation and Development (RC&D) program because previous reviews have not documented program accomplishments that would warrant higher priority. Furthermore, these activities are considered to be primarily state and local responsibilities.

As in fiscal year 1983, the fiscal year 1984 budget for the Agricultural Stabilization and Conservation Service recommends substantial reductions in the Agricultural Conservation Program (ACP) and related cost-share programs. Fifty-six million dollars is requested for the combined ACP, Emergency Conservation, Forestry Incentives, and Water Bank Programs. This is a reduction of $155.3 million below the 1983 Congressional level. These reductions are also based primarily on fiscal policy considerations. In a tight budget, investments in cost-sharing and watershed programs can be deferred so long as we maintain our technical assistance efforts and attention to soil erosion. There is also a new consolidated program proposed for Colorado River salinity control, funded at an increased level. Heretofore, salinity control activities have been carried out under the ACP and several Soil Conservation Service programs. However, the ACP is not ideally suited to special salinity control program needs and program planning and administration might be improved with funding coming from a single source.

For the Forest Service there is a 6 percent reduction in program funding. However, if the sharing of receipts with states from the timber and other programs is counted, total obligations will increase by 1 percent.

In his State of the Union Address, the President noted the recent upsurge in housing starts and housing permits. He also noted that with the progress we have made on inflation, there is still room for interest rates to come down further. All this bodes well for the strong recovery of the housing industry, the largest consumer of wood products in our economy. Since half the standing sawtimber in the country is on the National Forests, it is crucial that the Forest Service timber sales program play an important role in providing wood to the construction industry and avoiding an escalation of raw material prices as demand increases. In fiscal year 1984, there is a 4 percent increase in the timber program. There is also a 26 percent increase in the minerals program in recognition of the high rate of return from receipts generated from the program. The timber, minerals and serveral other programs are expected to produce $1.4 billion in 1984 receipts.

In recreation, expenditures are being reduced 4 percent. We have under development a legislative proposal that will permit an increase of user fees estimated at $25 million. It is desirable that the actual beneficiaries of programs bear a greater portion of the cost rather than imposing most of the burden on the taxpayers as a whole.

As part of the Asset Management Program administered by the President's Property Review Board, the Administration intends to propose legislation to broaden our authority to dispose of a small portion of the national forest lands. Lands to be identified for potential disposal would be lands that are difficult to manage or which can be more advantageously used in private ownership. The Department is currently in the process of identifying lands that may fit these categories. We estimate that there are 15-18 million acres which would have to be intensively studied for possible sale. In fiscal year 1984, $200 million in revenue is anticipated.

The budget proposal for State and Private Forestry is a reduction of 60 percent from the fiscal year 1983 appropriation. This large reduction in funding will substantially change the Federal role in trying to improve management of forested lands in non-industrial private ownership. Instead of cost-sharing for various protection, management and technology transfer activities, the Federal role henceforward will be more limited and indirect. Recent tax law changes provide economic incentives to private landowners for improving forest management.

For the domestic feeding programs, several proposals are being made. These proposals are aimed primarily at program simplification and the reduction of waste, fraud and abuse. Cost-of-living increases are also being temporarily deferred in line with the President's announcement. We believe that our proposals are consistent with the dual objectives of fiscal restraint while responding to the needy.

The Child Nutrition Programs are being funded at a level of $2.9 billion in fiscal year 1984. The school lunch proposals for fiscal year 1984 are technical in nature and will not alter the basic structure of free, reduced price, and paid meals that have made the school lunch program so popular. They include establishing an indexed reimbursement rate for reduced price meals, instituting a six-month delay in the cost-of-living adjustment, and transferring responsibility for determining and verifying eligibility for free and reduced price meals to the local food stamp office. Additional funds have been provided to cover the increase in administrative costs at the food stamp offices.

In addition, the Department is proposing a General Nutrition Assistance Grant to replace the Summer Feeding Program, the Child Care Food Program, and the School Breakfast Program. This consolidated grant will be funded at 85 percent of what these programs would have received in fiscal year 1984. It is expected that the elimination of the many detailed specifications, regulations and policies will provide States with a substantial savings in administrative costs. All told, these changes are expected to save about $313 million in fiscal year 1984.

For the Food Stamp Program, the Administration is requesting a $1.2 billion supplemental in fiscal year 1983 to assure that adequate funds are available for the rest of the year.

For fiscal year 1984 the Administration's proposals are intended to simplify program administration and increase the responsibility of State and local governments for the accuracy of their certifications.

We are proposing several actions to simplify program administration which should reduce errors by at least 20 percent (or approximately $200 million). Included is a provision to simplify the current series of income deductions by creating a combined standard/shelter deduction available to all households. The legislative proposal also provides for automatic eligibility and a standard benefit for food stamps for Aid for Dependent Children (AFDC) recipients. Finally, we propose to simplify the currently complex provisions on household definition.

Errors in eligibility and benefit determination made at the local level are the major cause of funds being improperly used. Since the Federal Government has no direct control over food stamp certification, the States should accept a greater financial responsibility for improperly issued benefits. We are, therefore, proposing that the States be liable for all erroneous certification errors exceeding three percent of total issuance.

We are also proposing legislation that would require states to operate a program which would combine the receipt of food stamp assistance with the opportunity to work. Such a program requires able-bodied food stamp recipients to work at public or private sector jobs as a condition of continued program participation.

As part of the overall government-wide freeze on cost-of-living increases, the automatic update of food stamp benefits on October 1, 1983, will be delayed until April 1, 1984.

We are proposing to transfer the "food subsidy" portion of the Elderly Feeding Program to the Administration on Aging. The Elderly Feeding Program is already housed in the Administration on Aging, and USDA has virtually no responsibility for administering this program. USDA simply provides commodities or cash-in-lieu of commodities as part of the program's Federal subsidy. Since many areas accept cash, this program is not a major commodity outlet.

The Special Supplemental Food Programs for Women, Infants and Children, the Special Milk Program, and the Food Donations Programs will all be carried out at essentially the fiscal year 1983 resource levels.

The Department provides an important subsidy to many food assistance programs in the form of commodities. In fiscal year 1984, the Department will continue its efforts to upgrade the commodity distribution system and move more of the commodities that are in abundance to schools, institutions, and needy persons, including food banks participating in the Special Cheese and Butter Distribution. Since the inception of the Special Cheese and Butter Distribution

Program in December 1981, 500 million pounds of cheese and 125 million pounds of butter have been made available to the states. About half of these amounts have actually been ordered by the states, to date.

I have discussed many of the legislative changes we are proposing in support of the fiscal year 1984 budget. A more complete listing of these proposals is submitted for your information.

I appreciate the opportunity to be here today and look forward to working closely with the Committee to accomplish the changes necessary to insure sustained productivity and financial stability for rural America.

MARKETING AND CONSUMER SERVICES

Food Safety and Inspection Service

Amendment to the Meat & Poultry Inspection Acts to Authorize "Less than Continuous" Inspection. This proposal would eliminate the "continuous" inspection requirement at meat and processing plants. The frequency of inspection of each facility will be based on criteria set out in the proposal.

Agricultural Marketing Service

Amendment to the Egg Products Inspection Act (EPIA) to Authorize "Less than Continuous" Inspection. This proposal would eliminate the "continuous" inspection requirement for other than breaking operations and permit the reduction of the number of surveillance visits to shell egg handlers.

Recovery of Costs Associated with Marketing Agreements and Orders through User Fees. This proposal would provide for recovery of the Department's administrative costs associated with the Federal Marketing Agreement and Order program, and provides for establishment of a trust fund for deposit of receipts.

Recovery of Costs for Operations Pursuant to the Plant Variety Protection Act through User Fees. Fees to cover the cost of handling new applications would be charged to breeders of sexually-reproduced plants who apply for protection under the Plant Variety Protection Act.

Recovery of Costs Associated with Printed Cotton and Tobacco Market News Reports through User Fees. This proposal would provide for the recovery of costs associated with the postage, printing and handling of printed cotton and tobacco market news reports.

Recovery of Costs Associated with Wool Promotion through User Fees. This proposal would provide for reimbursement of the costs incurred by the Department in the administration of the wool promotion program and for the conduct of the wool referendum.

MARKETING AND CONSUMER SERVICES

Animal and Plant Health Inspection Services

Recovery of Costs Associated with Plant and Animal Quarantine through User Fees. This proposal would allow USDA to prescribe changes for services provided to exporters requesting phytosanitary certificates for plants and plant products; importers and exporters of animals, animal products, or materials; for cleaning and disinfecting means of conveyance of animals; and to ensure that animals are transported humanely.

SMALL COMMUNITY AND RURAL DEVELOPMENT

Farmers Home Administration

Extension of Consolidated Farm and Rural Development Act to Assist Farmers and Other Rural People Who Are Unable to Obtain Credit Elsewhere. This proposal would extend the Act through FY 1986. The proposal will allow the Department to continue to provide a share of the financial assistance needed to sustain farmers and other residents in rural America using insured and guaranteed farm operating loans.

Extension of Title V of the Housing Act to Increase Local Autonomy as Well as to Reduce Dependence on the Federal Government as a Supplier of Credit. This proposal would revise Title V to provide for a block grant program to replace our existing rural housing programs. Grants would be made to States who could then design their own programs to assist low-income families in obtaining improved housing.

DEPARTMENTAL ADMINISTRATION

Office of Finance and Management

Provide for Additional Capitalization of the Working Capital Fund. This proposal would increase the authorized capital level of the fund. The capital would be derived from the value of the assets currently in the WCF, those assets which may be brought into the WCF at a future time as new activities are added, and such amounts as provided by appropriation acts.

NATURAL RESOURCES AND ENVIRONMENT

Forest Service

Permit the Reimbursement of Costs for Fire Fighters of Foreign Nations in Fighting U.S. Wildfires. The proposal would improve our wildfire fighting capability by allowing the Federal Government to reimburse foreign governments for costs they incur in wildfire prevention and suppression activities on U.S. Federal lands. The assistance would involve both manpower and equipment and we estimate the need for such assistance to occur 2 or 3 times each decade. The U.S. currently has authority to provide firefighting assistance to foreign nations.

Recovery of Costs through User Fees for National Forest Recreation Areas. This proposal would provide the authority to charge a reasonable fee to persons using National Forest recreation areas and facilities. The additional funds would support these areas and facilities over and above general revenue funds.

Authority for Disposal of Excess National Forest System Lands. Lands likely to be considered for disposal would include lands scattered, isolated, and in checkerboard ownership patterns, portions of the National Grasslands, and certain other lands already under paid special use permit. This proposal supports the President's Federal Assets Management program which calls for more efficient management of Federal properties and disposal of excess Federal lands.

FOOD AND CONSUMER SERVICES

Food and Nutrition Service

Amend the School Lunch Act and the Child Nutrition Act of 1966. This proposal will establish a General Nutrition Assistance Grant to replace Child Care, Summer, and School Breakfast Programs; establish an indexed reduced-price reimbursement rate for National School Lunch Program (NSLP); transfer responsibility for eligibility determination and verification for NSLP to the local food stamp office; delay by six months cost-of-living adjustments (COLA) for NSLP and Special Milk Program, and eliminate the Nutrition Education and Training Program (NET).

Amend the Food Stamp Act of 1977. The proposal will achieve administrative efficiencies through establishing a consolidated standard/shelter deduction; simplifying the earnings deduction; revising the household definition; and providing for simplified application procedures. Cost containment will be addressed through provisions for mandatory workfare; for standardized benefits for AFDC households; for assumption of responsibility for errors over three percent by the States in Fiscal Year 1984 and beyond, and a six month delay in COLA adjustments.

INTERNATIONAL AFFAIRS AND COMMODITY PROGRAMS

Agricultural Stabilization and Conservation Service

Improve Programs for the Stabilization of Agricultural Prices and Production. The Secretary would be given authority to maintain target prices through 1985 at the same level as for the 1983 crops by amending the Agricultural Act of 1949. Currently dairy products are authorized to be donated overseas under Section 416 of the Agricultural Act of 1949. Section 416 of the Act would be expanded with this proposal to include agricultural commodities other than dairy products.

Colorado River Basin Salinity Control. This proposal would establish a separately funded program for salinity control in the Colorado River. The change allows for a more coordinated approach to planning, implementing, and evaluating the salinity control program.

Establish an Improved Program for Extra Long Staple Cotton. This proposal would repeal marketing quotas and suspend acreage allotments to permit greater freedom by farmers in determining the most efficient use of their resources. The proposal would also lower the minimum loan level, which would permit ELS to again compete with synthetic fibers and in world markets while still providing price protection and permitting orderly marketing.

Repeal the Mandatory Honey Price Support Program. This proposal would permit the Secretary to support the price of honey by means of loans, purchases, or other operations using discretionary authority in accordance with Section 301 of the Agricultural Act of 1949, as amended. This would amend the Act to allow the price of honey to be supported, taking into consideration the needs of beekeepers as well as the potential cost to consumers.

Reduce Number of Community Agricultural Stabilization and Conservation Committee Elections and Restructure Election Process. This proposal would change community committee elections from being held annually to only once every three years, which would increase stability and decrease costs.

Chairman **Domenici**. Senator Chiles?

Senator **Chiles**. I think Senator Sasser was here first. I will defer to him.

Chairman **Domenici**. Senator Sasser?

Senator **Sasser**. Thank you.

Thank you, Mr. Chairman.

Mr. Secretary, I am disturbed by your budget recommendations for various nutrition programs. Let's consider the school lunch program, for example.

This administration began cutting the school lunch program back in 1981, and since that time over 62,000 schoolchildren in my State have dropped out of the school lunch program.

I represent a State that has one of the lowest per capita incomes of the 50 States, a State that has got an unemployment rate in excess of 12 percent. It has been higher than the national average now for over 18 months in unemployment, and half of these children who were cut must depend on free and reduced price lunches for their daily nutritional needs.

SCHOOL LUNCHES

Well now, you are recommending further increases in the price of the reduced-price meals, in delaying the indexing of Federal reimbursements to schools for their school lunch programs and involving local welfare agencies in the determination of eligibility for school lunch programs.

Aren't these changes going to further damage the national school lunch programs? The food service administrators, for example, in the city of Memphis say that these changes are going to cost that school district $300,000 this year, and seriously impair their program, and I might say parenthetically that yesterday a pound of butter was given away under the commodities surplus—the surplus commodities program in Memphis, and they had 15,000 people standing in line there to receive this pound of butter.

That is how desperate the situation is there.

My question to you is, aren't these recommendations of yours going to further damage the school lunch program, these budget recommendations?

Secretary **Block**. Senator, I think the most significant point to keep in mind is that we have kept in place the safety net of providing free lunches to those that qualify, and we have kept that in place, and those are the ones that are the neediest and have the greatest amount of need, and we have not tampered with that a bit. When you look at those who are receiving the reduced-price lunches, the numbers there are still substantial.

I just don't think that there is a very easy way to attack our efforts and the program we have had in feeding children in these schools. I think we have a very fine record in providing food for the children in the schools.

Furthermore, I know that there are people that can use food, and you bring up the point about people standing in line for butter. We have given away $1 billion worth of dairy products in the last year and this administration took the initiative to pilot the programs and put them in place and make them available to the people. We have done it effectively with cheese. We are doing it now in butter and we have had pilot projects with nonfat dried milk, and we are looking toward the possibility of expanding these.

So I really think our record is not so bad.

Senator **Sasser**. I think some of these food service administrators in my State might contest that assertion, Mr. Secretary. You are proposing this year no increase in funding for the women, infants and children feeding program, the WIC program.

You are proposing level funding, which, taking into account the increases in food prices that are calculated by some at 5 percent, and I think USDA might have a smaller inflation index, that means, in essence, that the WIC program is being cut.

WIC PROGRAM

Now, a statewide study of the WIC program in my State in 1981 found that when women did not participate in the WIC program, they had twice the incidence of low birth rate babies. They also found that when women in my State participated in the WIC program, anemia in newborn babies was decreased by 72 percent and growth stunting in young children was reduced by 57 percent and incidence of under-weight children was reduced by 70 percent.

Now with these measures of success we can still only serve about 50 percent of those individuals who want access to the WIC program. As a result of this so-called level funding this year some 115,000 low-income women, infants and children are not going to have access—or 115,000 will not have access to it that had access last year.

Now, with such a demonstrated record of success, and this WIC program does have a splendid record of success, and I wish my colleague, Senator Hollings, was here today, who has championed this program for many, many years, was here to speak about this.

But with this record of success, I don't understand why we are cutting this program.

Secretary **Block**. Senator, we are not cutting it.

Senator **Sasser**. Well, it amounts to a cut.

Secretary **Block**. We are leaving it at a steady level. The fact is that food prices have virtually stabilized in this country, and I think it is conceivable that other prices may not increase this year. If it does, it will not go up much.

Leaving the program stable, that is not bad testimony in times of the budget constraints that we all have. I think it is probably pretty good testimony to our efforts to continue to serve those that we have traditionally served under the WIC program.

SETTING PRIORITIES

Senator **Sasser**. Food prices went up last year, as I recall, 4 percent, and the figures that I have been looking at predict up to a 5 percent increase this year, and I am just struck by where we are putting our priorities.

We had the Secretary of State before this committee yesterday. Among other things, we talked of increasing the U.S. commitment to the International Monetary Fund.

The Chairman of the Federal Reserve Board, Mr. Volcker, is talking about that, $9 billion in increased funding for the International Monetary Fund to bail out the big banks of this country. Bad loans, poor judgment that they used over a period of years of loaning money to less-developed and under-developed countries.

Well, we see how we can do that, but somehow we can't seem to find the wherewithal to increase funding even to take into consideration inflation for a program as vital and with a proven record of success that this WIC program has, and we have to wonder where are we putting our priorities in this country? And I have to wonder where this administration is putting its priorities.

Thank you, Mr. Chairman.

Chairman DOMENICI. Thank you, Senator.

Senator Gorton, may I ask how much time you will spend here this morning?

Senator GORTON. A few questions and then I will leave, Mr. Chairman. However, why don't I defer to you?

Chairman DOMENICI. Let me just ask a couple.

Mr. Secretary, I am going to submit about 15 or 20 questions in writing since we are on, at least at this point, a very fast track. I would appreciate it if you and your people would answer them as quickly as possible.

If you could do it in 3 or 4 days, or 5, we would greatly appreciate it.

Secretary BLOCK. We will do that.[1]

Chairman DOMENICI. First, I want to commend you, Mr. Secretary. In the past the administration has recommended cutting the WIC program. You haven't done that this year, and I think that is a response to Congress. But whatever the reason, I think that it would not have been reduced, and I commend you for including it in your budget as the budget has, in almost all appropriated accounts, somewhat of a freeze at the 1983 level.

SCHOOL LUNCHES

With respect to the school lunches, the record again does not reflect any cuts in the school lunch program at all. The programs that have been alluded to were not the school lunch program, and in that regard I want to commend you for that, too.

I would suggest, Mr. Secretary, that there are some very exciting things happening at the local level with reference to school lunch programs in the country. I would hope that you were aware of those efforts and that you monitor them and pass information around to other local school districts.

I was absolutely amazed in my home city, Mr. Secretary, at what they have done in the school lunch program. In fact, I will send to your people a major news article about it. Parents got together with those who run the school lunch program, and what they did to eliminate plate waste is absolutely amazing. What they are producing is food that the kids like and that is nutritious, and as a result we are not finding huge garbage cans filled with the plate waste because the kids don't like the food.

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[1] See p. 381.

But there is another exciting fringe benefit in that community. Changes had been made in the school lunch program, which required those who could afford to pay more of the cost to pay more. This resulted in many dropping from the program. However, in this community they find they are not dropping out because they like the food. They ask their parents to give them enough to buy school lunch and then they buy it instead of hamburgers across the street.

This whole major school district has facts on that, and it is very exciting to me.

I would also tell you of something else that occurred, and I am surely not suggesting that we need a national program for it, but in one grade school, believe it or not, they coupled a school lunch program with an education on nutrition. A first grader was able to tell me spontaneously sitting there why he ate the food on the plate in a certain sequence, saving the cookies and oranges for last, and he was able to tell me why he no longer drank chocolate milk.

A 6-year-old told me that chocolate milk had too much sugar in it, and that she drank white milk and got her sugar from the four orange slices on that plate.

Now these were not sixth graders. They were 6-year-olds, first graders. I would suggest to you that that is rather an exciting activity, and if it is not being promoted by you, it ought to be. It shows how the school lunch program is used effectively as a nutritional educational tool.

I thought you just ought to hear about it, and I will send you the background on it. I think some kind of clearinghouse activity would be in order with reference to how improved school lunches in terms of both their nutritional quality and their tastefulness, how effective that is in using these programs.

PAYMENT IN KIND

With reference to PIK, how much of your assumed reduction in the CCC costs for fiscal year 1984 is predicated upon your estimates of the success of PIK?

Secretary Block. The current services is $12.4 billion for fiscal year 1984. The impact of PIK will bring it down to $9.7 billion. That is a reduction of $2.7 billion.

Then with the successful freeze on the target price, we further reduce it to $9.3 billion, and I say the "target price freeze." That means leaving the target prices for fiscal year 1984 at the 1983 levels rather than seeing them as they are supposed to ratchet up in accordance with the Farm Act of 1981.

Chairman Domenici. I have three questions with reference to that.

Mr. Secretary, do you agree with the farmers in my State who say that if we don't get the Internal Revenue position with reference to when the taxable transaction occurs on PIK change, that it is going to greatly diminish the opportunity to get 50 percent enrollment?

Secretary Block. I agree that unless we can do that, it will damage the program. I am convinced that we will get this job done and address it successfully.

First of all, I am optimistic that we will get legislation to the Congress by March 11 to correct the legislation.

Chairman DOMENICI. I assume you support the legislation?

Secretary BLOCK. I support it, and so does Secretary Regan. The whole administration supports it.

Sometimes it is difficult to get these trains on the track that fast, and we don't get the legislation. We will be making it possible so that when the producer signs up, he can sign a slip of paper at which time he will elect to receive his certificate for the grain in fiscal year 1983 or 1984. He can make his choice.

So, in other words, it will be taxable at the time that he chooses to elect to receive it.

So, we are going to make it work. It is better if we can get the legislation. I mean it is just easier, but we will work it one way or the other.

SET-ASIDE PROGRAM

Chairman DOMENICI. Second, one of the main problems with any set-aside program, Mr. Secretary, is the complexity of the program. It has a lot to do with when farmers sign up; that is, such things as how you calculate previous crop yield, and many other things.

Are you concerned enough to make sure that PIK is as simple as possible to administer and for the farmer to get involved?

Secretary BLOCK. Yes, sir, I believe we have been responsive to this concern. In fact, when we started designing the program we talked with representatives from the agricultural industry and farm groups and they have been counseling us since the day we started.

We have also taken a great amount, or number, of recommendations from the Congress and other interested parties.

I am convinced that it is as simple as we could make it under the circumstances, and I think there is a pretty good understanding of the program in the country.

The other effort that we have made is to insist that there not be any changes in it as we go down the road, because changing it would confuse the producers. We have told the Congress that we did not want the Congress to enact changes which would just disrupt and confuse farmers at a very critical time.

We think it is important to keep the rules the same and move ahead in a straight forward manner.

Chairman DOMENICI. My third question is a question, I am sure Senator Exon would be asking if he were here. Have you done any serious evaluating, either yourself or in conjunction with other departments of the Government, in an effort to analyze the economic impact on rural America of a PIK program which, if successful, would take 50 percent of the productive land out of crops?

What I mean is, are there going to be some peripheral economic problems following from using less fertilizer, buying less implementation machinery, employment, and has that been taken into consideration in terms of the overall agriculture program in the next few years?

Secretary BLOCK. Mr. Chairman, we have tried to do some relooking of that. It is kind of an elusive thing to get a handle on. If we are successful in getting out 23 million acres, 10 million in feed grains, 10 million in wheat and 3 million in rice and cotton, we believe that would take out about 13 percent of the acres that would have been planted in those crops.

We talked 50 percent and now I say 13 percent. But that has been the acreage reduction that we kind of felt we might be able to achieve under this program, and I might also add that the February 1 crop plan intentions tended to verify this projection of 23 million acres coming out of production, and that does represent 13 percent of the crops.

I don't feel that a 13-percent reduction in the crops would be devastating to those in agriculture or to those who service agriculture. Granted it is not going to help them. It would be better if this farm production plant was working at 110 percent of capacity, but as we look to the future the only salvation for the industry is to get supply and demand in balance, and there are only a couple of ways to do it.

One way is to starve farmers out. They can't afford to plant and produce certain crops by seeing prices decline to levels that would force them off the land.

The other is a government program that would aid in making this transition less painful. I think it is a price everyone is going to have to pay as we try to get price and demand back in balance.

We do have support from the fertilizer industry, the chemical industry, and the farm equipment industry. Although they realize this, it may be a little bit of a problem for the short term.

FARM CREDIT

Chairman Domenici. My last question, and then I will submit them in writing, has to do with the overall subject of farm credit.

Do I understand correctly that you are going through an overall review of the farm credit system?

If that is the case, is this the time to do that?

Secretary Block. The review has already been accomplished. We did this review in our Department of Agriculture. The Farm Credit System did their own review. The two reports are surprisingly close, close in agreement.

But the fact is, in my own opinion, I would not anticipate any changes in the Farm Credit System in the foreseeable future.

Chairman Domenici. What you are suggesting is that you can't tamper with things right now, whatever you might be anticipating, expansion, changing——

Secretary Block. I don't know. So I think the wisest thing to do is stay with the program just as it is, and the President said in his speech in Dallas before the American Farm Bureau Convention, he said, "I support the Farm Credit System, and recognize the contribution it has made to agriculture."

And that is an administration position. We do support it, and I can't imagine it would be tampered with.

Chairman Domenici. Senator Chiles?

FOOD PROGRAMS

Senator **Chiles**. Mr. Chairman, I want to set the record straight on something that was said earlier. I understand there is no cut in the school lunch program proposed, but there is a cut in related child care feeding and the breakfast program for young children by approximately $200 million, I think, and that is about 25 percent of the current services.

PAYMENT IN KIND

At the time we have these tremendous surplusses, Mr. Secretary, and we are setting up PIK programs and other ways to try to deal with them, I note that part of the Bureau of Reclamation budget is operation and maintenance of existing projects, but there is a 57-percent increase in loan programs to irrigation districts to bring new land into agricultural production.

What in the world are we doing, is the administration doing, by proposing large-scale reclamation projects to produce more surplusses of wheat and corn at a time when we have these tremendous things?

I know we have to take care of our constituencies, and I know that is a good constituency, generally speaking, but do we have to do that now?

Secretary **Block**. Well, I can't address it specifically. It is not in my budget. It is, I think, in Interior. My only reaction to your question is that, without any chance to consult with Secretary Watt or anyone on it, is that probably there would be more services provided and more advantages coming from it. The land might well be made available to towns and people who need water for different reasons.

There is on the horizon a shortage of water in this country.

Senator **Chiles**. I know there is a shortage of water, but there is no shortage of land for farm production right now, is there?

Secretary **Block**. You won't find my arguing with you on that, sir.

Chairman **Domenici**. Senator Gorton.

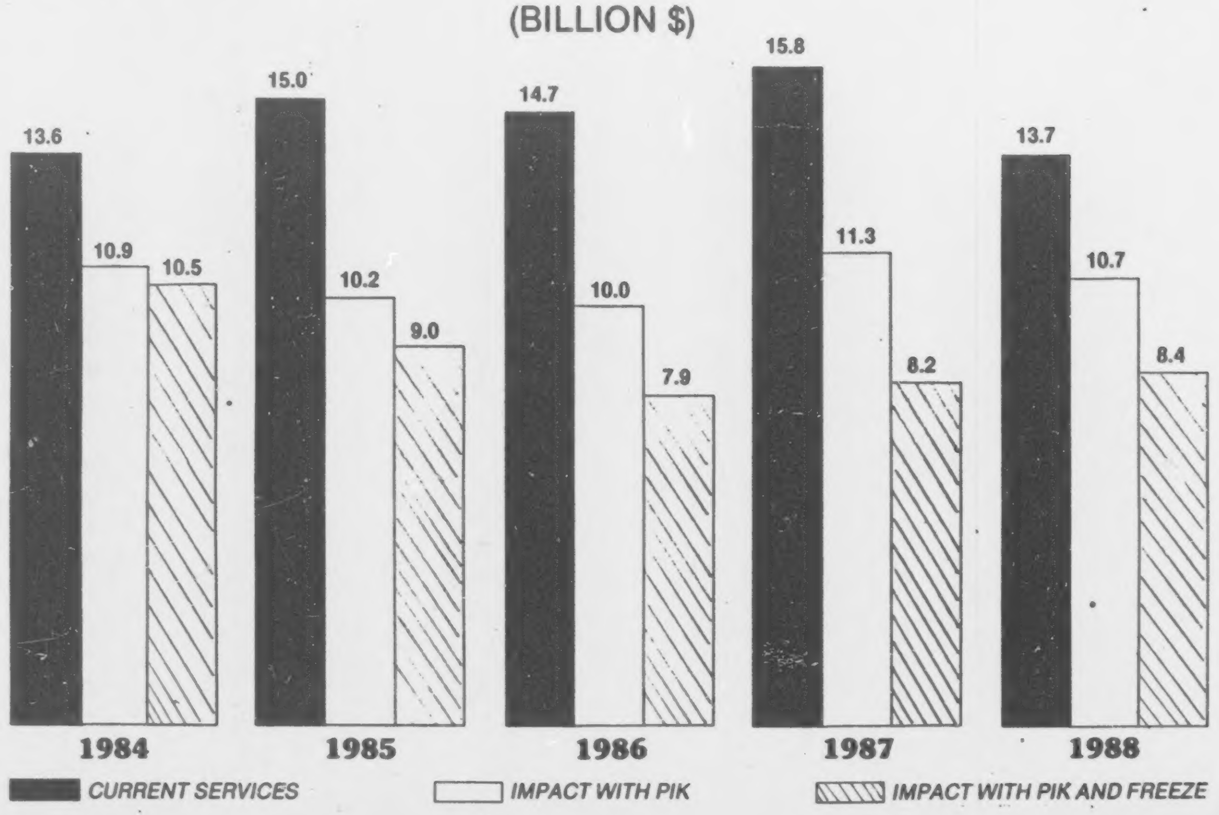
Senator **Gorton**. Mr. Secretary, you look fit enough to run a marathon. Are you running in Boston?

Secretary **Block**. No, sir. Are you?

PIK PROGRAM

Senator **Gorton**. No. I have a couple of questions to followup on those of the Chairman concerning the PIK program, which are more conceptual than budget related. I note the chart you have over there both on the impact with PIK and with a target price freeze. Is it the implication of that chart that the PIK program will be actively in operation, that you will be taking land out of production in each of the 5 fiscal years on that chart?

FEDERAL OUTLAYS FOR FARM INCOME STABILIZATION PROGRAMS FY 1984 – FY 1988, ADMINISTRATION PROPOSAL



Secretary **Block**. No, it wouldn't take that many years. It will be in fiscal year 1983 and some in fiscal year 1984. We anticipate we will have to continue it in fiscal year 1984. We are only looking at 2 years.

Senator **Gorton**. You do anticipate at this point that after 2 years you will have the surplusses down to a manageable level, and it will be no longer necessary to carry out the program?

Secretary **Block**. Yes, sir.

Senator **Gorton**. And the diagonal line bars are shorter than the solid bars because you will have restored demand and supply balances?

Secretary **Block**. Yes, we will have restored supply and demand into better balance and avoid many of the price problems we have recently experienced.

Senator **Gorton**. Nevertheless, you feel the payment-in-kind program is the kind of program that should be available for use by the Department at any future time at which we have the kinds of problems we face today?

Secretary **Block**. I do feel there may be a time when it might need to be implemented again. I am hopeful that it will not be, and I feel it is important that the program is a program that self-destructs as we use the surplusses down. The program is over when you don't have the surplusses to implement the program any longer. That is a good feature.

Senator **Gorton**. Are you asking for any legislative authority to give you more flexibility in the payment in kind program than you feel you have administratively now?

Secretary **Block**. We are not asking for this. We would not oppose, but would accept, legislative authority if it is clean. However, we would not accent legislation that is cluttered with other provisions that might change the program. As I said earlier, I don't want to confuse the producers and farmers.

I would as soon have nothing as to have something that could be confusing.

FARM PRODUCTION

Senator **Gorton**. Do you have any methods of assuring that when a given percentage of a farmer's land is taken out of production in exchange for his participation in the PIK program that, in fact, his production of that commodity will decline by that same percentage? Will we be faced with some of the problems we have been before that only the very marginal land goes out of production but production doesn't decline in the same proportion of the withdrawal of land?

Secretary **Block**. What you are suggesting is that for programs like this, it is difficult for them to be as effective as we would like them to be, or as they might appear to be on paper.

In many of these cases, we will be able to get substantial acreage out, 50 percent of some. That means we will be getting some good land in many cases. So there will be some real cuts in production. No question about it, if the program is successful with the kind of acreage reduction we are talking about.

But farmers are not going to put their best land in, and in some ways you should say maybe we should make sure we should. But there are also good reasons why we should put some of the marginal, more erosive land in. This is going to help soil and water conservation. There is a trade-off here, and we are willing to accept it.

Senator GORTON. So a 50-percent reduction in land area may not going to result in a 50-percent reduction?

Secretary BLOCK. No. If you had a 50-percent reduction, that is the maximum. That means every producer in the country has to sign up. It will happen in some counties, but it is not going to happen nationwide.

REDUCTIONS IN CROP PRODUCTION

Senator GORTON. As you prepared these charts, what reductions in the production of the crops subject to the PIK program are you assuming?

Secretary BLOCK. We are talking 23 million acres in fiscal year 1983.

Senator GORTON. What is your estimate for the crops in the program?

Secretary BLOCK. About a billion bushels of wheat and feed grains off the carryover that would have been there otherwise. I don't have the figures on the rice and cotton, but wheat and feed grains, and then in the case of wheat, 250 million bushels, assuming we hit our target.

Senator GORTON. With the chairman gone, I think you are the chairman, Senator Symms.

Senator SYMMS. Did you say you had a bushel quota instead of an acre quota?

Secretary BLOCK. We did not examine that.

Senator SYMMS. The reason is, you want the worst land out?

Secretary BLOCK. That is not maybe the only reason. I would—there are certainly other reasons for not having bushel quotas. I am not even sure that we have the legislative authority to implement a bushel program.

Senator SYMMS. In the part of the country that I come from, the farmers tell me if they could farm more intensively with fertilizer and herbicide applications that they could actually grow a certain number of bushels on more acres and could comply with the program more satisfactorily, that they end up with they have to intensively go out and put in fertilizer to grow, and they do have very high yield in eastern Washington and western Idaho. So they spend a lot of money to grow it, and find out they have lost money at the end of the year anyway.

I think it would be something worth having the Department look at. In some parts of the country I think it might be a benefit to the PIK program to give them a bushel program.

Do you agree with that, Senator?

Senator GORTON. I do.

Senator SYMMS. I want to note that it is good to see Wilmer Mizell here this morning, and I am happy, it is good to see him in the Department. He used to teach me about the agriculture programs in the House.

If I might, since the chairman is not here, I guess I can take the liberty to change the subject. I think you are to be congratulated for coming up with the WIC program.

FARM PROGRAMS

All these farm programs are very difficult to make operate. I come from a part of agriculture, as do you, that doesn't have a farm program. Hogs and apples, you know, and I have to say that I like the Government program we have in the apple business better than the other ones, because there isn't one, and it seems to work a little better.

But it is a difficult situation, and we do have an overproduction problem, and I think even any of us that cling to the market ideas will have to admit that we have a major problem here, and I just want to ask you, what have your economic advisers told you about how the reduction in the price of oil, which will have a big negative impact in Mexico and Venezuela and other oil-producing countries—we are probably going to be pressured in this Congress, and I can hear it coming, and your counterpart in the Treasury Department has been talking about more IMF funds.

How do we go back home to the farmers and tell them we don't have the credit to extend to them another year but maybe Congress will be extending money to IMF to help Mexico out of the financial mess they are in.

I think it is a good thing oil prices are going down, good for the American farmer and good for every nonoil-producing country, but not for Mexico and Venezuela.

Secretary **Block**. Senator, I was in Mexico last week and conferred with the Secretary of Commerce on our trade relationship and conferred with the Secretary of Agriculture on our mutual agricultural interests. There is certainly a lot of apprehension about the price of oil and the implications of that. We have not made a study in our Department of this recent decline which has come upon us in the last few days and I don't think certainly right now, we don't know the extent of this decline and where it is going.

FARM CREDIT

There is no question about it. There are some serious questions about lending money through the International Monetary Fund. Other kinds of loans, the Commodity Credit Corporation has made loans to Mexico and other countries, and some of these countries are getting in a lot of trouble and the prospects of repayment, however, probably, can be repaid. It may not be repaid quite as timely as we would like to see.

I still feel the question of providing credit through IMF, or whoever, to Mexico and other countries, is a separate question to the credit to farmers. We have adequate credit in farming. There is no shortage in the Farmers Home Administration. We didn't run out in 1982, and won't run out in 1983 and 1984. The system has ample money.

The question is, certainly there will be casualties in agriculture, because there are some people that we just can't loan them the money. There is no hope for repayment.

Senator SYMMS. You are right about that. Your predecessor in my part of the country lent out too much money to very bad risks. We have good people and good families, but they have borrowed money that you can, without any kind of computer or anything, figure out in your head how much interest they owe and how much the yield is from the farm. There isn't even money to pay the interest on the note. That is why I resisted any blanket moratoriums which are popular now and being talked about.

In fact, one of my colleagues from Idaho has increased a year, which would give a moratorium for 1 year on FHA loans. But I find in their work with the FHA in Idaho, they are doing all they can do and selectively working it out, as you are saying.

Secretary BLOCK. On that moratorium, Senator, I think as you are suggesting, and I would add if you check with farmers across the country, they do not support a moratorium. It is a very small minority that would want this to happen, and I think it is a selfish request, frankly, because if it is granted, the integrity of the farm credit, all the farm credit institutions, is going to be challenged, and money is going to cost us more and there will be less of it.

Senator SYMMS. I agree with you. All the ones who have managed to keep their money and management and farm together resent it greatly, and I think you are absolutely correct on it. I think at least in Idaho, we can be proud of the job the FHA Director is doing out there.

FOREST SERVICE APPEALS

I did want to change the subject, and I have a question. You can submit the answer if you are not prepared to answer it now.

Over the past few years I have been distressed by the abuse of the Forest Service appeal regulations and under the guise of service appeals, these actions delay bona fide timber sales, and this is at a tremendous cost to the timber industry and to the Forest Service, which loses timber revenues, and in payment of legal process fees, and to the local citizens who lose their share of the timber receipts and deal with the job losses which are already severe enough.

This works on stumpage receipts to the county commissioners to run the county with. It affects the people who live in counties that are 80 percent owned by the Federal Government.

A year ago, I received assurance from Mr. Peterson that action would be taken on dilatory appeals. But I have no information on that as of today.

I can see the cost to my State and the people every time I go home, but what is the cost to the Federal Government because of dilatory appeals? As I mentioned, you may not be able to answer this today, but if there is any way to come up with any kind of an answer to this that doesn't require a major expense to find out what it costs, but I think that the analysis of something like this might become a catalyst for Forest Service administrative action, and I would like to know what these delays cost the Federal Government in lost revenues from the States in legal fees and other costs associated with administering these appeals and the costs of timber sales that await completion of sales that are under appeals to proceed.

We have time after time letters from constituents explaining where they have bid, bought a timber sale, the EIS has been approved, everything is all set and then there comes in a small minority of people who come in and file an administrative procedure, and then it goes through the Forest Service appeal process and ties everything up.

We have been getting by on this in the last 3 or 4 years because the timber industry has slowed down. Now, if it turns around, we have a serious problem out there. I told one of your Assistant Secretaries that I thought we ought to make the Chief of the Forest Service a political appointee so we can get a change in the bureaucracy when we change administrations.

I still feel that way. I have seen a more responsive change in the management of the Bureau of Land Management lands in my State than I have in the Forest Service. The Forest Service almost acts like they never knew that there was an election in 1980, and that there was a change in the administrative procedures, and I really believe that this is a serious problem.

I know that you are tied up most of the time with the process of trying to represent American agriculture, and I commend you for that, because it is good to have a farmer on the Cabinet that can speak up for the American farmer, but I do think we have another big problem in the Agriculture Department, and that is failure of responsiveness to make quick, expeditious decisions on issues that have been gone over and studied and restudied and restudied and continually playing in the hands of extreme environmental groups.

End of my statement. You may not wish to answer it.

Secretary BLOCK. Senator, I will prepare an answer to the question that you did provide, and we will be working on this issue and work with you directly.

Senator SYMMS. Thank you very much.

The meeting is recessed.

[Whereupon, at 11:20 a.m., the committee was recessed.]

[The following was received for the record:]

WRITTEN QUESTIONS FROM SENATOR SYMMS TO SECRETARY BLOCK AND THE RESPONSES

FOREST SERVICE APPEAL REGULATIONS

Senator Symms. Mr. Secretary, over the last few years, I have been extremely distressed with the meteoric increases in abuse of the Forest Service appeal regulations. Under the guise of serious appeals, these actions have delayed bona fide timber sales, at a tremendous cost to the already depressed timber industry, to the Forest Service which loses timber revenues and must pay the costs of legal procedures to process the appeals, and the local citizenry who loses its share of timber receipts and must deal with the job losses that are already severe enough in our current economy.

Over a year ago, I received assurances from Chief Peterson that action would be taken to expedite consideration of such dilatory appeals, but I have not been notified of any changes to date.

Secretary Block. As Chief Peterson expressed a year ago, we have looked at the regulations governing appeals. Following review by a team of Forest Service officers from field units and public comment on 62 proposals, a proposed rule was published on August 20, 1982. The Forest Servie has forwarded their recommendations for a Final Rule and we expect to issue one soon.

Under the revised rule, the public will be able to appeal Forest Officer decisions, but with fewer options to use appeals for delay. The revised rule limits appeals of procedural matters to stays and dismissals and shortens the time for resolving these rules issues. The revised rule also corrects ambiguities in the present rule, streamlines procedures, and will reduce delays in reviewing an appeal.

Senator Symms. What are the cost to the Federal Government, including legal fees, in administering appeals of timber sales and what are the costs of dilatory appeals?

Secretary Block. Costs of administering appeals are integrated into the overall operations of the Forest Service and the Office of General Counsel. Although there is no easy way to separate out appeals which are dilatory, we estimate that administrative and legal costs for resolving 75 appeals before the Chief in FY 1982 on timber sales total less than $300,000, a figure substantially less than costs for litigation.

The bulk of appeals are resolved at the field level at an annual cost of several hundred thousand dollars. Here too, costs are integrated into the overall operations of the offices and a few court cases could easily cost more.

Senator Symms. What are the costs to the Federal Government in lost revenues from delayed timber sales.

Secretary Block. Ordinarily, a timber purchaser with 2 or more years supply under contract does not immediately operate a sale and there is no lost revenue when a sale is delayed. Although our intent is to plan timber sales far enough ahead so that any appeal can be resolved before the planned sale date, there are sales whose operations are delayed by stays. In a few cases, where a purchaser is without other sales, the delay will affect the timing of revenue collections.

With the exception of appeals related to legislation concerning Mount Saint Helens, we are not aware of any FY 1982 sales for which receipts were delayed. If the market picks up rapidly, there may be some delay in receipts in FY 1983.

Senator Symms. What are the costs of timber sales that await the completion of sales that are under appeal to proceed?

Secretary Block. Ordinarily, we resolve appeals rapidly enough to avoid this situation. While we are not aware of any sales in FY 1982 that were delayed as the result of an appeal on another sale, appeals and later court action did hold up sale operations on some planning units.

Occasionally, sales can be delayed by appeals on other matters. For example, the RARE II decision by the 9th Circuit Court Appeals has delayed some sales in FY 1983. An appeal on the road to the French Creek timber sale on the Payette National Forest may hold up the sale, but the sale is scheduled for 1984 and there is time to resolve the appeal before the planned sale date.

WRITTEN QUESTIONS FROM CHAIRMAN DOMENICI TO SECRETARY BLOCK AND THE RESPONSES

AGRICULTURE PRICE SUPPORT EXPENDITURES

Senator Domenici: The President's budget includes estimates for farm price support programs that, even after assumed legislative changes and a reduced current services base still are very high by historical standards. For fiscal years 1977 through 1981, farm price support outlays averaged $3.9 billion; for fiscal years 1982 through 1987, estimated outlays would average $12.1 billion.

What do these historically high long-term outlay estimates indicate about the state of our changing agricultural economy, but more importantly about how current federal farm programs function within that changing environment?

Secretary Block: The prosperity of American agribusiness is clearly dependent on export markets and external factors affecting those markets. Several factors have come together to cause downward pressure on farm commodity prices and farm income. The major factors have been large global supplies, the global recession, the increasing value of the dollar, unfair trade practices by the European Community, Japan, and others, and financial difficulties of many of our major importers. Under current programs, the exposure of the U.S. Government to increased farm support outlays has obviously spiralled as these external factors have decreased our levels of exports and market shares. In times such as these, farm programs need flexibility. While our PIK program will accomplish much in terms of reducing stocks and government price support outlays, it must be viewed as only a part of broader Administration efforts addressing trade and monetary issues affecting our farmers' prosperity.

Senator Domenici: Would you please discuss the basis for your proposal to freeze target prices at their current levels? Of the $3.1 billion assumed outlay savings in FY 1984, and $28.8 billion over the next five years, how much is due to the freeze on target prices and how much is due to the announced PIK program? Will the PIK program go beyond this crop-year?

Secretary Block: We believe that increased target price levels for the 1984 and 1985 crops of wheat, corn, upland cotton, and rice, as mandated by the Agricultural Act of 1949, as amended, will provide incentives for excessive production at a time when market signals do not call for increases. The increased production will likely result in the government acquiring large stocks of these commodities under the price support program. By freezing the 1984 and 1985 target prices at the

1983 levels, government program incentives would not be stimulating production to the point of building burdensome surpluses. Moreover, the significant reduction in inflation has eliminated the need for escalating target prices.

We anticipate that the PIK program could be a two-year program, depending upon the outlook for stocks. However, no final decision has been made yet on next year.

Projected savings as a result of the target price freeze and the PIK program are estimated to be substantial over the next few years. For the period FY 1983-FY 1985, outlays are expected to be reduced almost $10 billion, with 75 to 80 percent of the savings attributable to PIK and 15 to 25 percent attributable to the freezing of target prices. The remainder of the savings is due to other proposals such as adjustments in the ELS cotton and honey programs.

Senator Domenici: Direct government payments to farmers were about $2 billion in 1981 and are estimated to be about $4.0 billion in 1982. Therefore about one-tenth in 1981 and one-fifth of net farm income in 1982 was attributable to direct Federal Government assistance. Given the projected large farm support outlays over the near term, what happens to this ratio? Does the proportion of projected net farm income attributable to direct government assistance continue to rise or fall?

Secretary Block: Government payments are becoming a larger component of gross farm income (GFI). In 1981, direct government payments accounted for about 1.1 percent of GFI and in 1982 are projected to about 2.1 percent. Under current legislative authority, with escalating income support levels, it is likely that these ratios will continue to increase. However, since net farm income is also a function of numerous production costs, the ratio of outlays for direct payments to net farm income is not a universally accepted indicator.

Senator Domenici: Who benefits from federal farm price support programs? Will your proposal to freeze target prices change the distribution of direct farm payments in the out years?

Secretary Block: Federal farm price support programs aid producers directly but also clearly are beneficial to domestic and foreign consumers of our products. Price support programs assist consumers in obtaining an adequate and steady supply of commodities at fair prices. Our proposal to freeze target prices should not necessarily affect the distribution of direct farm payments because commodity prices and the resulting need for direct government payments are more likely to be functions of external events.

EXPORT CREDIT FINANCING

Senator Domenici: You have noted that agricultural trade fell for the first time in nearly a decade last year, to $39.1 billion. I understand that current USDA projections indicate that agricultural exports will in all likelihood decline again this year to about $37.5 billion. Given these declines, and the President's State of the Union Address that emphasized adequate export financing to sell American agricultural products, why did you reduce planned export credit guarantees in FY 1984 to $3.0 billion, from the current $4.8 billion planned FY 1983 level?

Secretary Block: The fiscal year 1984 export credit guarantee figure of $3 billion is a planning figure at this point in time. As you know, changing this level does not require Congressional action and can be done quickly by the Administration. For the current fiscal year, we have used our ability to quickly increase this level to meet marketing demand and export opportunities. At present we expect an improved world economic situation next fiscal year and believe that $3 billion will be sufficient to achieve our agricultural export objectives. However, should the situation require it, we will increase this level to attain the export goals we all share.

Senator Domenici: The 1982 Reconciliation Act required spending of between $175-190 million for export promotion activities. To date you have used $100 million, how will the remainder be used to support agricultural exports?

Secretary Block: We are continuing to review the most productive uses of the balance of $75-90 million available for this fiscal year. As you know, the use of the $100 million to initiate the Blended Credit Program has been very helpful in expanding our agricultural exports during this difficult world economic situation. However, we continue to face many challenges and will use these funds to meet these. The ability to use these funds quickly is most important and, therefore, maintaining flexibility in determining such uses is also of great importance.

Senator Domenici: In the current fiscal year, about $5.2 billion in export credit guarantees, direct government credit, and export promotion funds was authorized by the Department. Of this total $5.2 billion how much has actually been committed to date? What impact has these export funding policies had on agricultural exports, and therein, reduced CCC outlays? Simply stated how effective have these programs been in reducing budget outlays?

Secretary Block: The $5.2 billion authorization for FY 83 is only for export credit guarantees--GSM-102--and direct government credit--GSM-5--therefore, it does not include FAS funds for export promotion. The GSM-102 authorization is $4.8 billion; $3.4 billion is for the traditional guarantee program, and $1.4 billion is for the Blended Credit Program--BCP. The GSM-5 allocation is $350 million, all of which is for the BCP. As of February 25, 1982, $3.8 billion of the GSM-102 authorization were committed of which $440 million were in the BCP. Commitments under GSM-5 totaled $110 million. This leaves approximately $35 million of GSM-102 uncommitted in the traditional guarantee program and $960 million of GSM-102 and $240 million of GSM-5 uncommitted in the BCP. As the committed credit and guarantee lines are used by importers, export sales will rise by at least as much. Although the budgetary effects of these programs have not been quantified, we are confident they have been effective in reducing CCC budget outlays as well as promoting economic activity. Analysis is currently being conducted on this matter.

Egyptian Wheat Flour Program

Senator Domenici: The EC, I understand considers the Department's recently announced Egyptian wheat sale to be in violation of the GATT. How do you respond to these criticisms?

Secretary Block: In our flour understanding with Egypt, we are simply using subsidies to make U.S. wheat flour competitive in the face of export subsidies from other suppliers. We are not obtaining an inequitable share of world flour trade. We feel that much of our share has been lost as a result of subsidized exports from our competitors. Given what we know about prices from other origins, we are satisfied that our price to Egypt is in the general range of those other prices. There is, of course, no definable world flour price. In the Egyptian market, prices have long been based on subsidies.

Export PIK Program

Senator Domenici: Various legislative proposals would implement an export-PIK program. Such a program would probably be quite similar to the arrangements worked out on the Egyptian wheat sale. What authorization was available to conduct the Egyptian wheat sale? Do you need legislation for an export-PIK program?

Secretary Block: Authority to implement the Egypt flour export-PIK program exists in Section 5 of the CCC Charter Act. Section 5 provides authority to use CCC resources for the promotion of U.S. exports, i.e., to provide subsidies. Therefore, no new legislation is needed to provide general authority for an export-PIK.

U.S.-USSR LTA

Senator Domenici: Farmers apparently favor a long-term agreement with the Soviet Union. Do you expect the Soviets to buy up to their maximum 8 million tons this year? Will we continue to have one-year extension of the LTA, or is there any possibly of a multi-year agreement this time around?

Secretary Block: Soviet purchases of U.S. grain so far during the seventh year of the LTA total 6 million tons. The Soviets not only have the option of buying the base agreement level of 8 million tons of grain from the U.S. during the seventh year of the LTA--October 1982-September 1983-- but also may buy an additional 15 million tons without prior consultations. However, based on Soviet purchasing patterns to date, they appear to be maximizing their buying of non-U.S. grain. While we are optimistic that additional U.S. grain sales to the Soviets for the agreement year will be made, the extent of these sales will likely depend on the Soviet's outlook for the 1983 grain crop.

We remain hopeful that bilateral conditions will improve, and that discussions on a new LTA can get underway in the near future. This matter is under continuing review; at this point, all options remain open.

Egyptian Wheat Flour Program

Senator Domenici: When Secretary Shultz appeared before this Committee he stated: "Temporary, trade-distorting measures such as the wheat flour transaction can be justified on the grounds that "when all the world is mad, tis folly to be sane. But we should remember that those measures are not, in themselves, sane actions". Would you please comment on Secretary Shultz's observation.

Secretary Block: We have long been advacates of free trade, unencumbered by exports subsidies and continue to view the free market as the best way to allocate resources; however, as we have witnessed a recent sharp decline in our share of the world's grain and grain product trade we have had to take action to meet our competition. While we have taken steps to curtail our grain production, our competitors have continued to expand production in the face of large world supplies. In some cases, they have also used large subsides to move this production into the world market. We feel that the wheat flour sale to Egypt, for example, was an appropriate response to recapture some of our market share lost to competitor subsidies.

Future of Agriculture

SENATOR DOMENICI: What do you think is the long-term trend for global food prospects? Do you believe that the pessimistic views of the world food picture are rooted in a misreading of historical data?

SECRETARY BLOCK: To some extent, the reading of historical economic trends of the 1970's into macroeconomic forecasts for the 1980's overstated potential food demand pressures, particularly in the developed and high income developing countries. Current forecasts for slower economic growth than that of the 1970's, and the productive capacity of the world's agricultural resource base would imply a continued improvement in the global food balance during the 1980's. However, the global improvement does not, necessarily, mean that the specter of hunger and malnutrition, particularly in the Africa region, will be any less real in the 1980's than in the 1970's.

Food demand across the regions of the world is importantly influenced by economic conditions. While specific forecasts vary, macroeconomic forecasters generally agree that economic prospects for the 1980's will be less favorable than over most of the 1960's and 1970's. The early 1980's have already been marked by a slowdown in world economic growth and persistent problems with inflation, interest rates, and unemployment.

The world's agricultural resource base, including available technology, should allow global agricultural output in the 1980's to continue to grow at about 2.5 percent per year, roughly the trend of the past 15 years. There is a substantial amount of potentially arable land available for use in foreign countries and a back-log of productivity enhancing technologies (developed in the 1970's) available for adoption in the 1980's. Physical or technical constraints to maintaining the pace of food production is not likely to be a problem for the 1980's. The more serious problems are likely to be economic and financial constraints, especially in the less developed and heavily-indebted nations.

In the trade area, most of the supply and demand factors suggest that growth in foreign demand for U.S. products in the 1980's will resume but at slower rates than in the 1970's. The evidence also suggests that demand will be highly variable.

SENATOR DOMENICI: During the early 1970's Worldwatch Institute raised public concern about food security. Mr. Brown of that organization forecasted that "inevitably real food prices would rise..." What do you see as the long-term trends in real food prices and real commodity prices?

SECRETARY BLOCK: The farm sector faces the prospect of serious supply/demand imbalances this year and possibly next--imbalances not unlike the oversupply problems of the 1950's and 1960's. The current oversupply problem is due in large part to lagging growth in foreign and domestic demand due in turn to slow economic activity in the United States and the rest of the world. Expected faster growth in worldwide economic activity for the rest of the 1980's should help to reduce the excess production capacity somewhat, but the stabilization of farm prices in 1983 and the gradual improvement in 1984 and beyond relate directly to large-scale government intervention in the U.S. agricultural sector to restrain production.

Over at least the 1983-85 short-term, the U.S. farm sector alone appears capable of producing 10 to 20 percent more product at 1981 Farm Bill price levels than markets will absorb. With the acreage likely to come out of production in 1983--under ARP and PIK programs--there will be readily available cropland capable of being put into use in the mid-to-late 1980's as the demand for food and agricultural products increase. During this period only moderate increases in nominal prices are likely to be realized. Our projections do not take us past the decade of the 1980's. However, it might be expected that once these readily available resources are back in production, the cost of committing additional land and water resources to use could make gains in world food production dependent on further increases in nominal and possibly real prices.

Food price increases through the rest of the 1980's will continue to be determined in large part by the rate of inflation in the general economy. Food marketing costs, the largest aggregate component of the retail food dollar, are expected to rise at generally lower rates over the next decade than have been observed over the last decade. This parallels an expected slowdown in the general rate of inflation and leaves the farm-to-retail price spread unchanged in real terms at the end of the forecast period.

SENATOR DOMENICI: What does your analysis of the future tell us about the types of federal food and agricultural policies we should be pursuing today?

SECRETARY BLOCK: Our experience of the recent past and our view of the future indicate to us that agricultural policy must continue to grapple with the problems of price and income variability without jeopardizing our ability to remain competitive in world markets and must be flexible enough to permit adjustment to changing world conditions. Thus domestic commodity policies and programs must be designed to help protect farmers from the large swings in prices and income that we have seen in the 1970's and the early 1980's. To achieve this stability the main instruments of policy must be aligned more closely with world market prices. Such policy instruments must enable us to avoid surplus production and the accumulation of stocks which overhang the market and depress farm prices and income. Domestic farm policies which are aimed at protecting farmers from the conditions beyond his control must also enable market forces to operate more effectively, limit budget expenditures for farm programs, and contribute to reduced federal deficits.

The United States is the world's most efficient producer of agricultural products, thus our future trade policy must continue to stress access to foreign markets, export expansion, and the development of new markets. At the present time the United States is holding a disproportionate share of the world's stocks of food and agricultural products and we are alone in making production adjustments. Our trading partners, especially in Europe and Japan, must bear their fair share of the stockholding burden as well as share in the responsibility of adjusting production. The European Community in particular is not sharing these burdens currently but instead is resorting to export subsidies and other protectionist measures that erode our share of foreign markets. Although our commitment to a free trade policy is firm, we will nevertheless counter protectionist measures against us with carefully selected, targeted actions.

ELIMINATION OF DEFICIENCY PAYMENTS/MANDATORY SET-ASIDES

Senator Domenici: The CBO Deficit Reduction report reviewed a number of possible policy options that would reduce CCC price-support outlays. Would you please comment on these options as I list them:

Eliminate deficiency payments, effectively eliminate the target price system.

Secretary Block: The Administration proposed freezing the minimum target price levels for the 1984 and 1985 crop years at the 1983 levels rather than eliminating target prices in the FY 1984 President's Budget. Increases in target prices, as mandated by the Agriculture and Food Act of 1981, may have seemed reasonable in the context of the rapid inflation of 1980 and 1981, but we have seen a dramatic improvement in the inflation rate in the last year. The mandated increases in the target prices now provide incentive for production increases at a time when moderation is needed. In order to control this incentive for excessive production, we have proposed holding minimum target prices at their 1983 levels.

Senator Domenici: Require mandatory participation in acreage reduction or set-aside programs.

Secretary Block: Mandatory participation in an acreage reduction or set-aside program is bad farm policy because a mandatory program is not in tune with today's farmer. The farmer is not willing to take orders from the government year after year on what and how much can be produced or sold. A mandatory program suggests a continuous acreage limitation program which would send a signal to competing exporters that we are willing to underwrite the entire world's adjustments through production controls here. Competitors could increase production and exports at our expense, making our adjustment programs even more expensive than anticipated. In summary, the U.S. farmer cannot be told to cut production year after year while farmers from other nations take up the slack and the profit.

Senator Domenici: Prevent further grain entry into the farmer held reserve program.

Secretary Block: We do not believe the farmer-owned Grain Reserve Program needs to be capped at this time. The Department has taken several actions which will help reduce the CCC price support outlays pertaining to the program. Because of the payment-in-kind (PIK) program impact on reserve loans, the Department has established deadlines by which producers have to enter their grain into the reserve. The deadline for wheat, barley, and oats is March 31, 1983, and the deadline for corn and sorghum is May 31, 1983. Also, as the 1983 harvest periods begin, PIK participants will start to receive their own reserve stocks to satisfy their PIK needs. This process will help reduce substantially the current stocks held in the reserve. The Department has announced also that the immediate entry of 1983 crops into the reserve will not be permitted. Producers may enter their 1983 crops of wheat and feed grains into the reserve only upon maturity of their regular 9-month commodity loans. Entry level for all commodities will be at the regular loan rate.

PIK TAX SITUATION

Senator Domenici: Your PIK program currently faces the problem of farmers being taxed when they receive CCC commodities and therefore would be paying double taxes in one year. I understand you and Secretary Regan are currently working to amend the law and delay these tax liabilities.

What is the current status of this tax proposal?

Secretary Block: The Department of the Treasury, with the Department of Agriculture's assistance, is seeking legislation that would make PIK commodities taxable when they are sold. Legislation which would defer any income tax liability until the PIK commodities are sold or used in farm operations has been passed by the Congress and transmitted to the President. We are confident this legislation will be enacted promptly.

Senator Domenici: How is the problem impacting the farmers' registration for the PIK program?

Secretary Block: There would be a significant adverse impact on PIK participation if payment-in-kind commodities were taxable as income during the year in which they were received rather than in the year in which they were sold.

Senator Domenici: Since the deadline for signing up is only a few weeks from now, do you plan modifying the regulations to expand participation?

Secretary Block: No, the signup period will not be extended beyond the close of business on Friday, March 11, 1983. We have, however, arranged for county offices to remain open extra hours to give every interested farmer an opportunity to sign up for the program. Also, the offices will register the names of farmers who come in before the deadline but cannot be served because of a waiting line. These farmers will be signed up by March 17.

Senator Domenici: What changes, if any, do you plan if the legislation is not enacted?

Secretary Block: We believe legislation is the best solution to this problem.

DAIRY PRICE SUPPORT

Senator Domenici: The Omnibus Budget Reconciliation Act of 1982 called for a $13.10 per hundredweight milk support level and a 50¢ per hundredweight fee to be paid by producers. This 50¢ collection has been delayed due to a court order.

What is the current status of the court case?

Secretary Block: On December 21, 1982, the United States District Court for the District of South Carolina issued a temporary restraining order against collection of the 50 cents per hundredweight deduction on commercial milk marketings, announced in the September 24, 1982 determination of the Department. On January 10 of this year, it issued a preliminary injunction to the same effect. The Department has stopped all collection activity, but has announced that it will continue to defend its right to collect the deduction under the September 24 determination.

In addition to the South Carolina case, there are seven other cases challenging the milk marketing deduction. Hearings have been held in three of those cases, but no decisions have been issued. Hearings have not yet been held in the other four cases.

Senator Domenici: What is likely to be the outcome?

Secretary Block: It is difficult to determine the outcome. We strongly support our case. I will not predict the ultimate outcome based on the number of cases filed, before almost as many judges, for several different issues.

Senator Domenici: What have you assumed to be the cost of the dairy program in the current fiscal year and next?

Secretary Block: Net expenditures for the dairy program are estimated to be $1,452 million in FY 1983 and $601 million in FY 1984. These estimates assume full collection of the dairy assessment fees and include offsetting receipts from these assessments of $920 million in FY 1983 and $1,344 million in FY 1984. However, the legal actions regarding the 50-cent assessments have placed the collection in doubt. If CCC is prevented from collecting the dairy assessments, net expenditures for the dairy program would increase to $2,372 million in FY 1983, and to $1,945 million in FY 1984.

Senator Domenici: If the Department loses the case, what alternative proposals, if any, do you plan to control the problem of milk oversupply?

Secretary Block: Most alternative proposals now being formulated by the industry would require additional legislation to implement. The support price is currently set at $13.10 per hundredweight--the legal minimum. We have offered to work with the industry and the Congress to arrive at an acceptable alternative solution. We feel, however, that there should be a consensus in the industry as to the most effective alternative to be presented. To date, such consensus has not been forthcoming from the industry.

Senator Domenici: Has the current program affected milk production in any noticeable amount since its enactment last year?

Secretary Block: The current program was enacted in early September of last year and was implemented on December 1, 1982. However, collections were stopped by a court order on December 21, 1982. Therefore, producers have generally not been impacted by the current program to date. Milk production during October 1982 through January 1983 continued to increase and was up more than 2 percent from the same period last year.

USDA RESEARCH

Senator Domenici: The budget calls for a reduction in USDA research funds which would be the first cut in a decade. Last year you stated that you "continue to regard agriculture research as a high priority" and requested more funds. Why has research now been given such low priority that you propose program decreases of $15 million?

Secretary Block: The FY 1984 Budget is the third budget proposed by this Administration. I believe the support shown for agricultural research in these three budgets has been quite evident. At a time when most discretionary programs are being reduced due to the severe budget constraints, the budgets of the Agricultural Research Service (ARS) and the Cooperative State Research Service (CSRS) have been maintained or increased in FY 1982 and FY 1983. The Forest Service research program has not had such a high priority for reasons related to supply/demand relationships for forestry products.

This year, the increasingly urgent need to reduce Federal spending has compelled us to propose a reduction in some CSRS earmarked programs. But ARS and CSRS continue to receive more favorable budget treatment than most other agencies.

Senator Domenici: The State research grant program would take virtually the entire impact of the cut. Do you feel state research is less productive than the direct Federal programs?

Secretary Block: We believe state research is as productive as Federal agricultural research. We have been able to maintain level funding for the Hatch Act formula funds in this very constrained budget. The funding constraints did not permit funding to be maintained for most of the Special Research Grants. Maintaining the formula funds gives the states maximum flexibility to organize their research programs in the most efficient manner.

Senator Domenici: The 1981 Farm Bill provided that funds provided for state research work should represent at least 25% of your total research funds. Are we meeting this percentage? If not, why not?

Secretary Block: The 1981 Farm Bill provided that Congress should appropriate for the Hatch Act formula not less than 25% of the total funding level for ARS and most CSRS programs. We are not recommending that Congress appropriate the full 25% level in FY 1984. To do so would seriously hamper other research efforts, given the need to restrain overall spending. The FY 1984 budget would fund the Hatch formula at 22.2% of the statutory base. Without changing the overall research funding level, $20.5 million would have to be moved from other worthwhile programs to enable the Hatch formula to reach 25% and keep the Evans-Allen (1890) formula at the statutory 15% of the Hatch formula. $28.4 million in additional funds for the Hatch and Evans-Allen formulas would be needed if other programs were held constant. We do support a greater percentage for the Hatch formula as a long term goal.

FARM CREDIT

Senator Domenici: Do you believe that there will be an adequate supply of farm credit through FY 1984?

Secretary Block: Agricultural bank liquidity has increased. Loan to deposit ratios are at their lowest levels since 1976, which reflect both lower loan demand and higher deposit rates. Increased use by rural banks of participation agreements with larger banks should further increase opportunities for rural banks to provide credit to farmers.

The Farm Credit System is also in a good position for serving farm borrowers through its Federal Land Banks and Production Credit Associations.

Farm loans of the Farmers Home Administration are estimated at about $4 billion for both FY 1983 and FY 1984. Of this amount about $2.3 billion in FY 1983 and $2.5 billion in FY 1984 will be available for regular (non-emergency) farm loans. This compares to about $2.2 billion used in FY 1982 when there was no shortage of funds any time during the year.

Senator Domenici: How vulnerable is the farm sector to the financial stress of low farm income at a time when land values are dropping? What is your prognosis on FmHA farm loan defaults this year?

Secretary Block: There has been great variation within the farm sector in farm incomes and value of assets. For example, during the inflationary 1970's the returns to highly leveraged farmers far exceeded returns to debt-free farmers. Now the situation is reversed and debt-free farmers have the advantage. Further, the end to the rapid increases in land values experienced in recent years should put a halt to excessive borrowing, but should not hinder the repayment of existing loans.

Currently, almost half the total number of farms are debt-free. Only twelve percent of U.S. farmers have debt valued at more than 40 percent of assets and it is these borrowers who are in more serious difficulty today.

Recent surveys by the American Bankers Association and Federal Reserve Banks show that 5 to 10 percent of farms are financially vulnerable. In 1982, 2 to 4 percent of our nations farmers went out of business. Most did so by voluntarily liquidating their assets.

The American Bankers Association survey also showed that nationwide about 3 percent of bank borrowers had their financing discontinued in 1982. The rate ranged from less than 3 percent in the Corn Belt to 6 percent in the South. Nationwide, the rate was estimated to increase to about 4 percent in 1983.

FmHA reports foreclosure completed in 844 cases. That amounts to only 3/10ths of 1 percent of the borrowers. Another 6,000 liquidated their loans, and 1,245 borrowers chose bankruptcy because of economic pressures. In all, about 8,000 FmHA borrowers went out of business during the year for one reason or another, and in most case, the decision to leave farming for financial reasons was not caused by Farmers Home.

We do not expect any significant increase in the numbers of FmHA borrower defaults in 1983. We expect to stay with our borrowers, even those seriously delinquent, if they can show that any new loan, plus interest, can be repaid out of the current year's receipts.

Senator Domenici: Your testimony indicates that you intend to propose a rural housing block grant program of $850 million to replace the rural housing loan programs of the Farmers Home Administration. Would you describe the block grant program? Would this program support rural housing to the same extent as the current program? Would the program increase or decrease federal expenditures?

Secretary Block: Addressing those questions in sequence, we intend to let the individual states develop their own methods of providing housing assistance to low-income rural families. We feel the states can tailor programs to meet the specific needs of their residents and in so doing will provide more cost effective assistance than can FmHA's few but rather structured programs. The majority of the states have housing finance authorities or similar organizations presently providing housing assistance and we assume that many of these organizations will be designated to administer the block grants.

The proposed legislation provides the states maximum flexibility to address the housing needs of low-income rural families. The proposal permits a wide variety of assistance including acquisition, construction, repair, rehabilitation, financing, and rental assistance payments. Such assistance may be provided in the form of low interest loans or grants. The grant funds will be allocated to the states by formula based on occupied substandard housing, rural population and low-income households.

In response to the second part of your question regarding the level of support for rural housing provided by the block grant, we recognize that our proposal represents a reduction in the number of units than would be assisted. However, the majority of families assisted will be very low-income families. The proposed legislation requires that 80 percent of the funds be directed to families with incomes less than 50 percent of the state median family income.

Reaching families of that income level will, in all likelihood, necessitate the use of grants by the states. That means program funds will be absorbed up front rather than spread out over several years as with subsidized loans and the result will be less units assisted each year, but those receiving assistance will be those needing it the most.

For those rural borrowers not requiring subsidies, we intend to make FHA mortgage insurance available through FmHA county offices. This will provide mortgage bankers and savings and loan institutions an incentive to extend more credit to rural areas. This should help insure an adequate supply of mortgage credit for moderate income families.

The third part of your question deals with the effect of the block grant on federal expenditures. Outlays will temporarily increase as a result of the block grant. The increase will be offset in later years as the interest subsidy cost decreases on a declining volume of outstanding loans. For example FY 1984 interest subsidy cost for rural housing programs is estimated to be $1.5 billion. Those subsidy costs will decrease as outstanding loans mature.

Senator Domenici: What other Department of Agriculture programs are included in the New Federal proposal for block grants?

Secretary Block: In addition to the housing programs the new Federalism proposal includes, within the state block grant initiative, the water and waste disposal loan and grant programs and community facility loan program of the Farmers Home Administration.

SOIL AND WATER CONSERVATION

Senator Domenici: You note that your budget contains 6% less funding for soil and water conservation than the minimum you recommended in your December 1982 Resources Conservation Plan. Why are you requesting an amount less than your recent plan proposes?

Secretary Block: Our budget proposal reflects the urgent need to reduce Federal spending to improve the Nation's economic situation. This is clearly the overriding concern at this time. The Statement of Policy which accompanied the National Soil and Water Conservation Plan recognized the necessity for lower funding levels during times when priority must be given to other pressing National needs. I think you will agree that our long-term effectiveness in addressing soil and water conservation problems will benefit under a stable and growing economy in the farm sector and for the Nation as a whole.

We are committed to implementing the National Program for Soil and Water Conservation. We believe that much can be achieved by increasing the effectiveness of our existing programs without the investment of large increases in Federal funding. To this end our fiscal year 1984 budget includes a modest increase to expand the targeting effort under our Conservation Technical Assistance program to address the most critical erosion and water conservation problems. Emphasis is also being placed on the less costly management practices which help to protect the resources and also provide a quicker return to the operator. Budget decreases where proposed, are primarily in those areas where work can be delayed with less of an adverse impact on overall conservation progress until the Federal budget situation is less constrained. In total, the 1984 Budget at only 6 percent less than the RCA program projection reflects the high priority which the Administration assigns to these discretionary nondefense activities, which as a group are slated for substantial reductions.

Senator Domenici: If we continue to face a stringent budget situation, would it be desirable to develop legislation or regulations which require soil and water conservation practices?

Secretary Block: A tighter Federal regulatory approach to soil conservation in the form of "cross-compliance" has been and continues to be widely debated. The idea of increased Federal interference in the decisions of agricultural producers is, in general, viewed with skepticism in the farm community and does not, of course, reflect the overall policy of this Administration to reduce the degree of Federal regulation in farm and other programs. Yet, there are some specific instances where we believe cross-compliance can bring about an improvement in conservation and where the farm community appears ready to accept specific, pinpointed cross-compliance.

The National Program for Soil and Water Conservation which was released in December includes a provision that requires borrowers of Farmers Home loans for farm ownership and soil and water conservation to have conservation plans or at least have made application for one. This was supported by the public and has a sound basis because a conservation plan will protect the future value of the farm being acquired or the conservation measure being installed. Thus there is a direct connection between the conservation requirement and the purpose of the loan.

The Administration supported Senator Armstong's bill which came up as an amendment to H.R. 7072, Agriculture Appropriations bill for FY 1983. This legislation would deny certain USDA program benefits to producers who produce an agricultural commodity on highly erodible land by annual tillage of the soil. The Administration intends to continue supporting this legislation because it is aimed at a specific soil abuse for which farm programs have some responsibility. This is the kind of "cross-compliance" that has grass-roots support from farmers, is aimed at specific results, and does not intrude on any farmers except those who want to participate in a Government farm program and are putting soil and water resources at risk in a clearly defined way.

BRUCELLOSIS

Senator DOMENICI: Your budget proposes a 40 percent reduction in the brucellosis control program. Your statement indicates the program is a low priority since the infection rate is less than half of one percent and federal expenditures currently are twice the industry losses. However, we understand there are those who predict the infection will explode if we reduce the program. How can we continue to protect our cattle and dairy industries with such a large budget cut?

Secretary BLOCK: Our budget proposal permits continued protection of the cattle and dairy industries from brucellosis. Federal funds will be concentrated on surveillance for the disease and preventing interstate spread. Secondary emphasis will be placed on vaccination and elimination of infected herds. We believe that our 1984 request will not lead to an explosive spread of brucellosis infection. On the contrary, we expect to achieve eradication, assuming the States, industry, and producers pick up a greater share of program costs.

Senator DOMENICI: Are you abandoning the plan to eradicate the disease?

Secretary BLOCK: No, we will continue a control program which maintains the eradication objective.

GUAYULE RESEARCH

Senator Domenici: One of the lesser known, but important research programs currently funded by USDA is that of guayule research. The guayule plant yields a form of rubber which is extremely important since it offers a domestic rubber product.

I have been told by researchers that funding for research programs being conducted in New Mexico, Texas, Arizona, and California would all be terminated in the 1984 Budget. Why is such important research being terminated?

Secretary Block: The Native Latex Act grants program is one of the CSRS targeted grants proposed for termination. The Administration's primary goal was to maintain funding for the Hatch Act formula, which gives states maximum flexibility to focus research on priority needs. The Native Latex grants have been funded since FY 1980. These grants have funded state research projects that have resulted in significant improvements in guayule production practices, seed production, water utilization, salinity management, and increased rubber content. The Defense Department announced its intent last year to sponsor a small-scale guayule production and processing venture, in order to establish the feasibility of commercializing guayule production. A $20 million loan has been awarded to the Gila River Indian community. The research findings and pilot project should help establish the cost effectiveness of guayule production. Additional research under the Native Latex authorization would be desirable if the goal of reducing Federal spending were not more urgent.

INCREASING AGRICULTURAL EXPORTS

Senator Domenici: Efforts to increase our agricultural exports abroad were mentioned in the President's State of the Union Address. What new initiatives are included in the budget to accomplish this stated goal?

Secretary Block: The Foreign Agricultural Service--FAS--spearheads the Department's efforts to accomplish export goals consistent with those mentioned in the President's State of the Union Address. Within the FY 1984 budget request, FAS received a $10.2 million increase above the FY 1983 estimate that will provide real growth for foreign market development activities. Our strategy to increase exports utilizes a careful mix of market development activities with existing export expansion tools, such as P.L. 480 and CCC Export Credit programs. Of the $10.2 million increase, $4.3 million is for new FAS/cooperator export expansion efforts that could increase exports by $500 million for the period 1984 through 1988. New export market emphasis will be directed toward a broad range of activities. These include, but are not limited to, expanding exports of oilseeds and products to Europe, Middle East, Africa, Asia and Latin America -- $2.2 million. Improving livestock production and feed processing technology; inadequate storage, handling, milling, and baking facilities, and improving the knowledge and understanding of U.S. foods and feed grains and the grains marketing system targeted at areas such as Asia, Latin America, Africa and the Middle East -- $1.3 million. Increasing industry knowledge of current processing technology and product quality for efficient purchasing decisions concerning tobacco, cotton and seeds while at the same time undertaking initiatives that will acquaint foreign consumers with U.S. production and offset competition from manmade fibers. Targeted areas include Asia and Africa -- $345 thousand. The remainder of the $4.3 million will be used to focus on developing foreign markets for forest products in Asia and Europe, increasing consumer awareness of U.S. horticultural products in Latin America, Europe and Asia and the promotion of dairy, livestock and poultry products in such areas as Europe, South and Central America, Middle East and Asia.

Also, in the FY 1984 budget we are currently allocating 3.1 billion for the export credit program comprised of $3 billion for GSM-102 -- export credit guarantees -- and $100 million in GSM-5 -- direct government credit. The $100 million in direct credit will be blended with $400 million in credit guarantees for a continued implementation of the blended credit program. While this level of funding is an initial one for planning purposes, we are prepared to change these levels should the need arise.

EXPORT CREDIT FINANCING

Senator Domenici: Have there ever been any defaults on loans guaranteed with these programs? Does the FY 1984 budget make any allowances for loan defaults?

Secretary Block: CCC has not declared default on any debts covered under the Non-Commercial Risk Assurance Program or the Export Credit Guarantee Program and to our knowledge, no defaults have been declared by U.S. banks holding CCC guarantees covering such debts. However, CCC has honored its obligations to U.S. banks as a result of official rescheduling of debt and in instances where debtor countries have not met their payments when due. Obligations honored by CCC as of December 31, 1982 under its guarantee programs total $527.7 million. In structuring our FY 1984 budget request, consideration was given to the potential impact on outlays by payment of claims under the guarantee programs. In both FY 1983 and FY 1984, a contingent outlay is included in the budget in anticipation of such claims.

AFTERNOON SESSION

The committee met, pursuant to recess, at 2:08 p.m., in room SD-608, Dirksen Senate Office Building, Hon. Pete V. Domenici (chairman of the committee) presiding.

Present: Senators Domenici and Exon.

Staff present: Stephen Bell, staff director; William Hoagland, senior analyst for agriculture; Richard N. Brandon, minority staff director; and Kenneth Erickson, analyst for agriculture.

OPENING STATEMENT OF CHAIRMAN DOMENICI

Chairman DOMENICI. The committee will please come to order.

We are most pleased to have a distinguished panel with us today. We are going to try to accommodate our distinguished guest from Nebraska, Gov. Robert Kerrey, by letting him, with your permission gentlemen, go first. He is on a little bit tighter time schedule. Perhaps he would have to leave after his testimony. We will try to work it out. I would hope he could stay a while and have somewhat of an exchange with the other witnesses.

We have Leo Polopolus, the president of the American Agricultural Economics Association at the University of Florida. Doctor, we are glad to have you.

We have Robert O. Anderson, chairman of the board of Atlantic Richfield. Mr. Anderson, we are delighted to have you here. We are very anxious to hear your version of what we ought to be doing in terms of agricultural stability and growth in this country.

Gale Johnson is chairman of the Department of Economics, at the University of Chicago. I am delighted to have you.

I am very pleased that L. E. Pete Davis, the president of the New Mexico Farm and Livestock Bureau, is also here.

We will proceed after recognizing the distinguished Senator from Nebraska and call the witnesses in the order that I just enumerated. Unless somebody has a time problem, we will do it that way. I yield to the distinguished Senator from Nebraska, Senator Exon.

OPENING STATEMENT OF SENATOR EXON

Senator EXON. Thank you very much, Mr. Chairman. I want first to congratulate and salute the chairman for the distinguished panel that we have assembled here today. I have served on this committee for the fifth year now since I have been a U.S. Senator. While we have had previous discussions generally about agriculture, I salute the leadership of the chairman in suggesting that we have this panel that basically is devoted to the critical situation that faces agriculture in general today. I am very pleased with the caliber of the witnesses today.

As a Nebraskan, of course, I am particularly proud that Gov. Robert Kerrey is here with us today. Governor Kerrey understands well the difficulty of agriculture because he has to, among his other responsibilities, recognize that the degree that agriculture is successful or not has a great deal to do with the success of Nebraska, which he heads so well. Also with him today is Mr. Rob Raun, the director of the Department of Agriculture in Nebraska. Rob Raun is a man that I have known and worked with also for a long, long time. He is a dirt farmer. He also served for 14 years on the board of regents of the University of Nebraska after becoming a distinguished graduate of that institution. So, he knows all sides of agriculture. I am particularly pleased to have my two associates from Nebraska with us today. Thank you, Mr. Chairman.

Chairman DOMENICI. You are welcome, Senator.

I want to say, Governor, you certainly do not have to worry in your State as to whether or not agriculture is attended to up here in terms of your distinguished Senator. We cannot have a hearing on any subject that involves economics, growth, or the like, without counting on your Senator to raise the issues of agriculture.

We were fortunate this morning—and this is a followup—to have the Secretary of Agriculture here. You should all know that. He testified in some detail and at some length about the program for agriculture as it is in the budget, including a description of the PIK program ani some of the other important innovations. He is rather optimistic as to the future. Maybe that is a fair way to state what he said. I am not so sure that all of you are that optimistic, but we want to hear your frank discussion.

I would say to my good friend, Senator Exon, at your suggestion we chose the governor from Nebraska. Not only do we have Pete Davis, who is the head of the farm bureau in New Mexico, but we consider Robert O. Anderson a New Mexican. He has such a wide reputation for involvement in the corporate community, the agricultural community, and every kind of community that you can think of and is on the cutting edge of a great deal of economic and corporate thinking. He does happen to live in Roswell, N. Mex., and we are most pleased to have him as a distinguished citizen of our State and to have him here today.

With that, we will proceed, Governor. If you have prepared remarks and do not intend to read them, they will be made a part of the record in their entirety in any event.[1] You may proceed as you see fit.

STATEMENT OF HON. ROBERT KERREY, GOVERNOR, STATE OF NEBRASKA, ACCOMPANIED BY ROB RAUN, DEPARTMENT OF AGRICULTURE, STATE OF NEBRASKA

Governor KERREY. Thank you, Chairman Domenici and Senator Exon. I appreciate the opportunity of being able to come here and appear before you to give you a Nebraskan's impression of the budget and the problems that it presents for our State.

You should know that your Governor is putting on a seminar today in New Mexico on the use of pension funds for economic development. Our representatives are down there. I am sure he is down there teaching us some things that we might be able to use in our State.

BUDGETARY PROBLEMS MAKE IT DIFFICULT FOR AGRICULTURE

I principally wanted to indicate that the overall budget problem, particularly the news that we get that there is a $200 billion deficit projected, that the trillion dollar debt could go to $2 trillion in 5 years, and that the interest payments on that debt could be $120 ro $130 billion. The overall budgetary problems that we are currently having at the national level make it very difficult for agriculture or any of our businesses in our State to look into the future with a great deal of optimism.

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[1] See p. 405.

We have heard a lot of things talked about. We have heard a lot of things discussed. It seems clear to us that what we really would prefer is to have a 5-year plan that gets those deficits down to $100 billion. We prefer to do those things that are necessary.

I would suggest that our people are prepared to do the things that are necessary in order to bring that budget down into line, the deficit down into line, to reduce the increases in the defense expenditures and restrain entitlements of our Federal budget, and to eliminate future tax cuts in order to in 1983-84 bring that budget deficit into a sustainable level.

We heard not too long ago that, when we had high deficits, that caused inflation. Today we have got $200 billion of deficits. Inflation is down. Unemployment is up. We are really confused, but we are not confused about the thought of having the Federal Government out borrowing the savings that we are going to need to fuel our own recovery.

The question that an awful lot of the farmers and ranchers in Nebraska are having right now is this. Does the Nation want them working hard to produce our food? It is not an accident that people have left the farms and come to the cities. It is not just because of the lack of profit. It is because it is very hard work. But we need profit in order to be able to survive. We need price in order to do that.

It has become almost a cliche to say it. Agriculture is the most efficient production and distribution system in the world. We are not coming to you asking for help because of lack of efficiency. We are not coming to you talking to you about some assistance because we failed to produce or failed to do our job.

PROBLEMS CREATED AT FEDERAL LEVEL

When New York City overspent and got in trouble, the Nation was quick to help. When the Penn Central Railroad got in trouble and when Chrysler was in trouble, the Nation was quick to help. Agriculture today is in trouble not because of any inefficiency, not because of any lack of ability on our part but because, in my opinion, of a number of things which were done at the Federal level that produced problems for us back in our home State.

In the early 1970's, we embargoed soybeans and fixed the price of beef because we thought the prices were going up too fast. It practically killed the beef industry in our State. Four years ago, we embargoed grain sales to the Soviet Union, making us an unreliable trading partner and a supplier of last resort.

The new administration came into office planning no new embargoes but has given us de facto embargoes instead. Then the Federal Government today is overspending, in our opinion, leading to record deficits and record debts. This, coupled with a very tight money supply policy, has caused high interest rates, an overvalued dollar, and decreased international demand for our products.

This, in our opinion, in Nebraska's opinion, is the course to financial ruin which has been charted for our farmers and ranchers.

It has been charted independent of our own individual action or own individual attempts to grow our products and to be profitable.

Many times, it seems to me, that, when we are faced with difficult and seemingly overwhelming prices, we tend to grasp at easy solutions and in the process forget the underlying problem. Thus, I submit, is the case with our current payment-in-kind program.

PIK PROGRAM IS GOOD

Let me first say that I think the PIK program is a good one. I think it is a good program designed to help, but I think it will help. In short, it is the best thing we have got going for us in the short term. But we must remember that it is only a short-term solution and it cannot substitute for long-range planning for the problems of our agricultural sector.

The PIK program will reduce production and the surplus of grain in America. But reduction of the surplus, particularly the reduction of the expenditures by the Federal Government, is not a sufficient goal in and of itself. The reason the surplus must be reduced is to increase commodity prices. The ultimate objective is to raise commodity prices and improve the potential for farm profits again in this Nation. I emphasize this because, when you look at the administration's proposals for the loan and target price levels, you see a trend to lower commodity prices.

The administration's recommendation is to freeze the target price for corn and wheat even though the National Farm Act of 1981 calls for an increase. Furthermore, the Secretary of Agriculture said that he will administratively rollback the loan price of corn from $2.65 a bushel to $2.55 and the price of wheat from $3.65 to $3.55.

So, my concern is that, if we adopt the PIK program as quick-fix solution, as I believe that we must do, but then immediately return to the cheap-food policy which has plagued our country for years, we will do nothing but create a even greater crisis in the future for the agricultural sector of this Nation.

PEOPLE DO NOT BENEFIT FROM CHEAP-FOOD POLICY

This cheap-food policy does not benefit the people of the United States. We do not buy our food from the Saudi Arabians. We buy it from ourselves. Each time the value of a bushel of corn goes up a dime, we generate nearly $1 billion of income for the people of this Nation. It is generated from the ground up. There are towns and cities of this Nation that need that income very much.

Increased prices for raw agricultural products mean better schools and better roads for America. A more profitable agriculture means a more secure America.

I am sure you have heard all this before. You have heard people come back here and give you this information before. But I tell you that I think our need is for a long-term approach. We need to focus clearly on the basic shortcomings of our current Federal approach to agriculture.

Let me examine quickly for you, before my 10 minutes run out, some of my specific concerns.

We lack a business-like concerted effort to market our agricultural products. We must, first of all, become a reliable trading partner again. We have got to begin to compete. It is naive to think that the Europeans or the Canadians or the Australians are going to lessen their support for their own farmer. It is not realistic to think that they will not use every tool available to gain access to the world markets.

I feel America should use credits, guarantees, bilateral agreements, and long-term agreements to do the same. We cannot afford to continue to be the supplier of last resort.

I am encouraged by several national bills that will form part of our international marketing effort. The export PIK bill proposed by Chairman Domenici and the bill introduced by Senator Exon to dedicate Export-Import Bank funds to the agricultural products are both worthwhile and positive steps.

Second, we cannot ignore the conservation of our soil and water resources. It needs a new commitment. The most recent survey of soil and water resources indicates that the United States will lose significant levels of agricultural production if we do not take appropriate action. In the face of this, our administration proposes a 30-percent cut in land conservation programs.

Third, I think that our agricultural research, our teaching and extension, have been the secret weapons of American agriculture. It is the reason that we are as productive as we are today, coupled with the hard work of folks like Rob Raun here. We have improved genetics, the most efficient production technology and sophisticated disease control. I am concerned we may not continue to develop this high level of agricultural technology by failing to push aggressively forward to develop new technologies.

AMERICAN AGRICULTURE FACES CRISIS

The administration proposes that we reduce research funds to the States by $26 million. Cuts in special programs of the Cooperative Extension Service could mean a reduction in programs which are designed to insure that new technology will eventually be applied on the farms and ranches of the land. The proposed reduction of $34 million for the brucellosis control program, for example, could adversely affect the production of protein for our Nation. This especially impacts a State like mine, which is on the top five nationally of cattle slaughter, livestock fed, and livestock marketed. It could erase years of progress in our attempts to control this very serious animal disease.

American agriculture, in short, faces a crisis today as we as a nation face an important turning point in our attitude toward our farmers and ranchers and our Federal approach to keeping American agriculture strong must be well thought out. We cannot afford to live year to year and plan to solve each crisis as it arises. We need to address the underlying problems of agriculture. We must not narrow our focus only to what is the best way to cut the budget in 1984. Instead, we must seek what is best for our ability to produce food for the future of our entire society as a nation.

It is said that the trouble of agriculture today is that we have done too good a job, that we have produced too much. But I say that the trouble is that as a nation we assume as a people that we will always have plenty of cheap food. The farmers are always going to be out there working hard to produce food for us. I assure you that we are indeed motivated by a love of the land. But we also need a profit. For that we need higher prices. For that we need a strong farm program.

That is the essence of my testimony. I appreciate the opportunity to deliver it to you today.

Chairman DOMENICI. Thank you very much, Governor. Without objection, we will insert your prepared statement into the record.

PREPARED STATEMENT OF HON. ROBERT KERREY, GOVERNOR, STATE OF NEBRASKA

Mr. Chairman, members of the Committee: The annual federal budget deficit is scheduled to reach $200 billion. Our federal debt is over $1 trillion and scheuled to reach $2 trillion.

In response, The Administration is proposing a five year program to reduce the deficit to $64 billion, if everything goes right. I have heard from no one who believes we can wait five years. We cannot wait.

We know what we have to do and we need to do it now.

CRISIS WILL CONTINUE

No matter what initiatives are devised by Congress to address our agricultural problem, the farm income crisis will continue unless our total national economic house is in order.

We know we have to:

(1) Reduce the increase in defense expenditures
(2) Restrain entitlements and
(3) Eliminate future tax cuts.

The queston I continue to hear from Nebraskans is, "Will it be done?"

The question I come to ask you is: Do you want the farmers and ranchers throughout the nation to continue to efficiently grow your food. The migration from the farm to the cities has not been accidental. One of the main reasons is it is very hard work. Without a chance for adequate financial rewards, will the hard work continue?

When New York City needed help, the federal government responded.

When Penn Central and Chrysler needed help, the federal government came to the rescue.

But when American agriculture, the most efficient production and distribution process in the nation and the world, is hurting and that hurt threatens to cripple our national security, what are we willing to do?

ROAD TO DISASTER

The road to disaster for agriculture over the last ten years has been painfully clear.

(1) In the early 1970's, we embargoed soybeans and fixed the price of beef to drive agriculture prices down and drive many producers out of business.

(2) Four years ago we embargoed grain sales to the Soviet Union making us an unreliable trading partner and a supplier of last resort.

(3) The new Administration promised no more embargoes but has given us defacto embargos, instead.

(4) Then, federal over-spending has led to record deficits, record debts.

This coupled with a tight money supply has caused high interest rates, an overvalued dollar and decreased international demand for agricultural products.

This is the course of financial ruin which has been charted for our farmers and ranchers. The time for long term solutions is at hand.

PIK PROGRAM

Many times, it seems to me, that when we are faced with difficult and seemingly overwhelming crises, we tend to grasp at easy solutions and in the process forget the underlying problem. Such, I submit, is the case with the current payment in kind program. First, let me emphasize that PIK, in my opinion, is a sound and worthwhile proposal. In short, it is the best thing we have going for the short term.

We must remember, however, that it is only a short term solution and cannot substitute for long range planning for the problems of our agricultural sector.

The PIK program will reduce production and the surplus of grain in America today. But the reduction of the surplus is not a sufficient goal in and of itself. The reason the surplus must be reduced is to increase commodity prices.

The ultimate objective is to raise commodity prices and improve the potential for farm profits.

I emphasize this because when you look at the Administration's proposals for the loan and target price levels, you see a trend to lower commodity prices.

The Administration's recommendation is to freeze the target price for corn and wheat even though the National Farm Act of 1981 calls for an increase. Furthermore, the Secretary of Agriculture has said he will administratively roll back the loan price of corn from $2.65/bushel to $2.55/bushel and roll back the loan price of wheat from $3.65/bushel to $3.55/bushel.

My concern is that if we adopt the PIK program as a "quick fix" solution and then immediately, return to the "cheap food policy" which has plagued our country for years, we will do nothing but create an even greater crisis in the future.

This cheap food policy does not benefit the people of the United States. We do not buy our food from the Saudis, we buy food from ourselves. Each time the value of a bushel of corn goes up by 10 cents an additional $840 million is pumped through the towns and cities of our nation.

Increased prices for our raw agricultural products mean better schools and better roads for Americans. A more profitable agriculture means a more secure America.

LONG-TERM APPROACH

The need is for a long term approach. We need to focus clearly on the basic shortcomings of our current federal approach to agriculture. Let me examine some of my specific concerns.

I. The United States lacks a businesslike, concerted effort to market our agricultural products in the international markets.

A. We must first of all be a reliable trading partner. We must therefore cease using food as a weapon and encourage the State Department to rely on other means to address foreign relations problems.

B. We must compete. It is naive to think that the Europeans, the Canadians and the Australians are going to lessen the support of their farmers.

It is not realistic to think that they will not use every tool available to gain access to the world markets. I feel America should use credits, guarantees, bilateral agreements and long-term agreements to do the same.

We cannot afford to continue to be the supplier of last resort.

I am encouraged by several national bills that will form part of our international marketing effort.

The export PIK bill proposed by Chairman Domenici and the bill introduced by Senator Exon to dedicate export-import bank funds to agricultural products are both worthwhile and positive steps.

II. Conservation of our soil and water resources needs a new commitment. The most recent survey of our soil and water resources clearly indicates that the United States will lose significant levels of agricultural production if we do not take appropriate action. In the face of this the administration has proposed a 30-percent cut in land conservation programs.

III. Agricultural research, teaching and extension have been the secret weapons of American agriculture. We have improved genetics, the most efficient production technology and sophisticated disease control. I am concerned we may not continue to develop this high level of agricultural technology by failing to push aggressively forward to develop new technologies. New technology must be developed now if we are to meet production needs 10 to 20 years from now.

The administration proposes that we reduce research funds to the States by $26 million. Cuts in special programs of the cooperative extension service could mean a reduction in programs which are designed to insure that new technology will eventually be applied on the farms and ranches of the land.

The proposed reduction of $34 million for brucelosis control could adversely affect the production of protein for our Nation. This especially impacts a State like Nebraska which is in the top five nationally in cattle slaughter, livestock fed and livestock marketed. It could erase years of progress in our attempts to control this serious animal disease.

TURNING POINT

American agriculture faces a crisis today, and we as a nation face an important turning point. Our attitude towards our farmers and ranchers and our Federal approach to keeping American agriculture strong must be well thought out.

We cannot afford to live from year to year and plan to solve each crisis as it arises.

We need to address the underlying problems of agriculture. We must not narrow our focus to only what's the best way to cut the budget in 1984. Instead, we must seek what is best for our ability to produce food for the future of our society as a nation.

It has been said that the trouble with agriculture is that we've done too good a job; we've produced too much. I say the trouble is that as a nation we assume we'll always have plenty of cheap food; that farmers will always work hard and produce for us. I assure you, we are motivated by love of the land, but we also need profit. And for that we need higher prices.

Chairman DOMENICI. I have a few questions. Let me ask you what your timeframe is, Governor.

Governor KERREY. I plan to sit through and listen to all of the discussion, so there is no hurry to ask me any questions at all.

Chairman DOMENICI. Would you like then to proceed?

Senator EXON. Let us proceed.

PRICE EXPECTATION FOR COMMODITIES

Chairman DOMENICI. I would want to call one fact to your attention, Governor. With reference to the price expectation for commodities, if you will look at the budget in terms of economics, there is a projected increase in inflation for the year 1983 over 1984, all of which is attributable to the expectation that the price of commodities will go up. I just wanted to make the point because I would assume from your testimony that the target price and loan price would be the only indicator of what the farmer would be getting. If you look at the assumptions that are made, it is assumed that programs will work so that the price will go up. We join in hoping for that. We are not even embarrassed to tell the American people that that is the only way that we are going to get agriculture sound. The price of commodities must grow to at least yield a profit.

I will share some other specifics with you later, but let us now go to Dr. Polopolus.

Senator EXON. Mr. Chairman, maybe one question now that I would like to ask the Governor.

Chairman DOMENICI. Sure.

Senator EXON. It may be covered in other testimony here, but I think it is critical that we look at this. The general assumption is that PIK is probably going to be at least of some short-term benefit to agriculture. The Secretary of Agriculture has indicated that it is possible that we might have to go to the extension of the PIK program for a second year. Maybe that would be in order.

DO BETTER JOB OF PLANNING AHEAD

Just for the record, I would hope that we would do a better job of planning ahead and notifying agriculture as to what the programs of the Federal Government are going to be so that they can plan accordingly.

For example, the present PIK program was somewhat harmful to our wheat producers that planted winter wheat before the program went into effect. I would hope and think that here in Washington we could recognize that we must simply plan further ahead to get the job done.

Second, let us assume that the PIK program is at least going to be beneficial to the family-size farmer. I ask the Secretary of the Treasury and other leaders in the administration whether or not we have any economic study at all as to what effect the institution of the PIK program is going to have on the ag-related industries: the feed dealers, the fertilizers, the suppliers, Main Street rural America, if you will. I was just wondering, Governor, if you have any indication yet as a Governor of a major food-producing State as to what effect this might have on the rest of the economy.

Governor KERREY. Well, certain sections of the economy there is little doubt that it is going to hurt: feed, seed, fertilizer. Those folks are going to have fewer purchases. At the same time, that means that the expenses for the operators are going to be down. We had a discussion earlier with the people from the corn growers. As a result of the reduced expenditures, they are likely to have more money to buy things and need to make some additional purchases. So, those could easily offset one.

ADDRESS THE LONG-TERM PROBLEM

I am not so much concerned about the success of PIK because I think, if we sign up for it, it will be successful and help reduce inventories of crops and help to get prices up in the short term. My testimony only deals with the long-term problem primarily, which I think has got to be addressed by bringing the deficits into line so that we as individuals out there can borrow and save without having to worry about the Federal Government coming up and outbidding us for our own money.

We need those deficits down in order, particularly, if we are going to do it without a great deal of inflation. We need them down.

I would urge the committee to consider that as a part of a long-range program.

I also would urge the committee on PIK that we do see short-term assistance. I think we are going to be able to cope and get along with PIK, given a few adjustments in it. But I hope that the underlying impetus for PIK is not just to bring the deficit into line, which is beneficial, but that the underlying impetus of PIK is also to stabilize prices for those producers.

The language of the farm bill itself says that it is to stabilize prices for producers and consumers. What we out there in Nebraska sometimes worry about is that, when there is a big high inventory, why, the consumers are not nearly as worried about it anymore. But just let there be a shortage, and all of a sudden that surplus will belong to the Nation again.

We are concerned about the long-range implications of the farm bill.

Senator EXON. Thank you, Governor. Thank you, Mr. Chairman.

Chairman DOMENICI. Doctor?

STATEMENT OF LEO POLOPOLUS, PRESIDENT, AMERICAN AGRICULTURAL ECONOMICS ASSOCIATION, UNIVERSITY OF FLORIDA

Dr. POLOPOLUS. Thank you. Mr. Chairman and members of the Senate Budget Committee, I am honored and pleased to present my views on the economy, the budget, and policy issues affecting agriculture.

There are now some tangible signs of economic recovery in the United States. The decline in the rates of inflation, interest, and unemployment are of major economic significance. Other encouraging signals include the increase in housing starts, the decrease in business inventories, and the increase in industrial production.

While the U.S. economy is entering a phase of growth and recovery, the world economy is still in the doldrums and affected adversely by high rates of inflation, balance of payments problems, and, as we know from the news today, instability in petroleum markets, and a lessened ability to buy American products. The sharp rise in the exchange value of the dollar in relation to most foreign currencies has reduced the competitiveness of American exporters and improved the competitive position of imports in the domestic market. In this gloomy economic world, the specter of protectionism tends to dominate national interests, further aggravating international trade flows.

NO IMPROVEMENT EXPECTED IN FARM ECONOMY IN 1983

The agricultural economy of the United States does not appear to be positioned for recovery in 1983. Burdensome supplies, relatively low prices, depressed farm income, decreased farm exports, and lower farmland values are characteristic of a weak economic situation. While many costs, including interest rates, have dropped, farm product prices have declined even more rapidly, causing serious cash flow problems. Net farm income in 1982 was the lowest since 1933. While farm bankruptcies and foreclosures are above historic levels, we are fortunately not having the rampant wholesale farm liquidation that we had in the 1930's. Overall, no significant improvement is expected in the farm economy and the industries that serve agriculture in 1983. The expected outcome is continued low grain prices, weak domestic demand for red meats, and further declines in the value of agricultural exports.

The collapse of the farm economy in the 1980's was the result of the downturn of many factors, the national and world economy, the increased exchange value of the dollar, the loss of exports due to embargoes, the wide open production philosophy of U.S. farm programs, and the assumption by the American farmer that the inflation syndrome of the 1970's would continue and that such indebtedness could be paid back with cheaper future dollars.

Moreover, there was an inherent propensity to expand production because credit was readily available on the basis of rising farmland values. From a taxpayer's standpoint, the public cost of farm programs in the late 1970's was minimal, as the private market cleared sufficient supplies to avoid excessive Government payments and stockpile accumulations.

We have now arrived at a serious crossroads in American farm policy. It does not seem appropriate to return to the policies of the 1950's or the 1960's. Obviously, with the charts that have been presented this morning, Government stimulation of agricultural production is unwarranted since the Government cost for income and price stabilization becomes politically unfeasible and fiscally damaging.

FARM POLICY PROBLEM NOT DEALT WITH REALISTICALLY

In my view, the administration's fiscal 1984 U.S. Department of Agriculture budget does attempt to deal realistically with the farm policy problem. There is an attempt to trim the spiraling cost of commodity programs, expand exports, and retard the production of wheat, corn, grain sorghum, rice, and upland cotton with a payment-in-kind program. The payment-in-kind program will reduce stocks somewhat, but the program is not expected to significantly improve farm prices for the commodities affected in 1983. There is some hope for 1984 and 1985.

Because of the pressure of time, I will skip a number of remarks that are in the prepared testimony and go to another point that has been expressed very well by the Governor.

The present efficiency and productivity of the farm production system is largely the product of previous investments in resident instruction, research, and extension of the land grant university system and of the U.S. Department of Agriculture. I am disappointed that the 1984 fiscal budget does not provide even a meager increase for the Cooperative State Research Service and the Extension Service. There is ample evidence that societal returns for investment in these activities are at least 50 percent per annum. Most of these societal returns are earned by consumers. Since every American is a consumer of foods, the returns from such activities are shared by all Americans.

AGRICULTURAL AND FOOD SYSTEM ARE NEGLECTED AREAS

I may be departing a bit from the tempo and momentum of most of the discussion, but I view a very significant problem area for our society. I view as one of the most neglected areas of research and education of our American society the agricultural and food system beyond the farm gate. There are several reasons for public investment in the marketing and distribution system.

First—and we had eight regional meetings in Florida, by the way. The No. 1 problem of Florida farmers is marketing. But, first, farmers presently have a greater need for assistance with marketing strategies and financial management than production technology.

Second, productivity growth of the food-marketing and distribution sector of the U.S. economy has performed poorly relative to on-farm productivity.

Third, increases in food-marketing and distribution costs have contributed substantially to the inflationary spiral in the United States since 1972.

Fourth, the marketing margin represents 65 percent of retail food costs, and this margin is enlarging over time.

Fifth, private sector research and development in the food system beyond the farm gate has become increasingly oriented toward product proliferation and market promotions as opposed to improving the productivity and efficiency of that system.

In my Presidential address before the American Agricultural Economics Association, I proposed that the Congress of the United States should promote the general welfare, reduce inflation, and improve productivity of its agricultural and food resources by enacting special funding for food systems research and education. The aim of this legislation would be to develop new technologies and management efficiencies beyond the farm gate from a coordinated effort with land-grant universities, the U.S. Department of Agriculture, and other appropriate agencies and institutions. Productivity growth and marketing efficiency require increased attention in such areas as postharvest handling, processing, raw product assembly, transportation at various stages, wholesaling, storage, retailing, food service, exporting, importing—and it goes on and on—pricing at all levels. The new age of computer technology also provides opportunities for improving product and input market information—and there is some concern at this point so far as the potential decline in our data base for industry and management—and thereby through computer science and technology improve the pricing and marketing efficiency.

INTERNATIONAL TRADE POLICY IMPORTANT TO U.S. AGRICULTURE

I would like to speak for a moment about international trade policy. I know we have one of the truly giant experts with our panel here on that subject. I would like to just make a few comments about the importance of international trade policy to U.S. agriculture.

We have experienced increased integration in our country with the world economy over many decades but particularly the past decade. One consequence of this internationalization has been the increased vulnerability of domestic agriculture to international events. Financial markets in London and Tokyo influence the price U.S. farmers pay for borrowed capital. Political decisions in the Middle East and around the world may determine the price of fuel, fertilizer, and pesticides that are vital to the farmer of Citra, Fla. or elsewhere in the United States. Diplomatic relationships between countries may also change and affect agricultural trade. What seems to be certain is that instability of agricultural trade will continue to be a major source of uncertainty for agricultural producers.

Bringing it down to a little bit more specific level, tariff and nontariff barriers, since we are interested in expanding our exports. We have a very difficult time in dealing with some of these items. For example, these barriers do offer obstacles for export market expansion. As an example of these barriers, the European Economic Community limits the export market potential of the Florida citrus industry by providing preferential duties for Algeria, Morocco, Israel, and Tunisia for imports of orange and grapefruit juices into the Common Market. The ad valorem duty rate for Florida products is approximately three times the duty rate from these preferred countries. Take Japan, which produces no grapefruit. It imposes a high tariff on grapefruit juice amounting to 25 percent of value. In addition to the tariff, Japan limits the total volume of grapefruit juice with a global quota which is extremely restrictive. Similar tariff levels and quotas apply to orange juice and other agricultural commodities.

CARIBBEAN BASIN INITIATIVE

Now finally, a comment with respect to the President's Caribbean Basin Initiative, because there is some component of the agriculture budget as well in dealing with the CBI. There is considerable interest in the United States and Florida agriculture regarding the likely impact of President Reagan's Caribbean Basin Initiative, or the CBI, as it is known. The program seeks to promote economic development in designated countries of Central America and the Caribbean from a package of trade, aid, and investment. While the bill has not yet been approved by the Congress, in my opinion, serious doubts exist as to the ability of the CBI to achieve its development objectives.

Measures that encourage domestic economic policy changes within the basin countries may be a better alternative to the CBI. A preliminary assessment of the program's impact on Florida's agriculture lead us to conclude that the program as presently proposed will have only modest adverse effects. Monitoring the rule of origin provision to minimize transshipments from non-CBI countries is recommended, as is the need to prevent the introduction of foreign plant and animal pests and diseases from imports from the basin region.

Finally on this CBI, it is my recommendation that funds be made available to assess the economic impact of the proposed CBI initiatives on the agricultural sectors of the recipient countries as well as agriculture in the United States before making an extensive commitment of U.S. funds for aid and investment.

Thank you, Senators. It is my privilege and pleasure to be here.

Chairman DOMENICI. Thank you, Dr. Polopolus

TESTIMONY OF LEO C. POLOPOLUS, PRESIDENT OF THE AMERICAN AGRICULTURAL ECONOMICS ASSOCIATION, AND PROFESSOR AND CHAIRMAN OF FOOD AND RESOURCE ECONOMICS OF THE UNIVERSITY OF FLORIDA*

BEFORE THE COMMITTEE ON THE BUDGET, UNITED STATES SENATE

February 23, 1983

Mr. Chairman, Ranking Minority member, and members of the Senate Budget Committee, I am Leo C. Polopolus, President of the American Agricultural Economics Association and Professor and Chairman of the Food and Resource Economics Department of the University of Florida. I am honored and pleased to present my views on the economy, the budget, and public policy issues affecting agriculture.

There are now some tangible signs of economic recovery in the United States. The decline in the rates of inflation, interest, and unemployment are of major economic significance. Other encouraging signals include the increase in housing starts, decrease in business inventories, and the increase in industrial production.

While the United States economy is entering a phase of growth and recovery, the world economy is still in the doldrums and affected adversely by high rates of inflation, balance of payments problems, instability in petroleum markets, and a lessened ability to buy American products. The sharp rise in the exchange value of the dollar in relation to most foreign currencies has reduced the competitiveness of American exporters and improved the competitive position of imports in the domestic market. In this gloomy economic world, the spectre of protectionism tends to dominate national interests, further aggravating international trade flows.

The agricultural economy of the United States does not appear to be positioned for recovery in 1983. Burdensome supplies, relatively low prices, depressed farm income, decreased farm exports, and lower farmland values are characteristic of a weak economic situation. While many farm costs (including interest rates) have dropped, farm product prices have declined even more rapidly, causing serious cash flow problems. Net farm income in 1982 was the lowest since 1933, adjusted for constant 1967 dollars (1983 Economic Report of the President, page 269). While farm bankruptcies and foreclosures are above historic levels, we are fortunately not experiencing the wholesale farm liquidation drama of the 1930's. Overall, no significant improvement is expected in the farm economy and the industries that serve agriculture in 1983. The expected outcome is continued low grain prices, weak domestic demand for red meats, and further declines in the dollar value of agricultural exports.

The collapse of the farm economy in the 1980's was the result of the downturn of national and world economies, the increased exchange value of the dollar, the loss of export markets due to embargoes, the "wide open" production philosophy of United States farm programs, and the assumption by the American farmer that the inflation syndrome of the 1970's would continue such that indebtedness could be paid back with "cheaper" future dollars. Moreover, there was an inherent propensity to expand production because credit was readily available on the basis of rising farmland values. From a taxpayer's standpoint, the public cost of farm programs in the late 1970's was minimal, as the private market cleared sufficient supplies to avoid excessive government payments and stockpile accumulations.

We have arrived at a serious crossroads in American farm policy. It does not seem appropriate to return to the policies of the 1950's and 1960's. Obviously, government stimulation of agricultural production is unwarranted since the government cost for income and price stabilization becomes politically unfeasible and fiscally damaging.

The Administration's Fiscal 1984 U.S. Department of Agriculture Budget does attempt to deal realistically with the farm policy problem. There is an attempt to trim the spiralling cost of commodity programs, expand exports, and retard production of wheat, corn, grain sorghum rice, and upland cotton via a payment in kind program (1984 Budget Summary). The payment in kind program will reduce stocks somewhat, but the program is not expected to significantly improve farm prices for the commodities affected in 1983. There is some hope for 1984 and 1985.

The difficulty with many government programs is not their stated goal or objective, but the legislated numbers, such as loan rates, target prices, and parity prices. These numbers often provide economic incentives or disincentives to decision makers which produce results contrary to the intended objective or goals. Unfortunately with most farm programs, the economic environment changes more rapidly than the Congress' ability to legislate corrective changes. For example, the 1981 Farm Act prescribed increases in target prices for wheat, feed grains, rice, and cotton which are inconsistent with the now static trend in costs of production. In fact, some input prices have actually declined since 1981. In the case of honey, the application of 60 percent of parity for support prices has resulted in government acquisitions. The parity concept is outdated and not reflective of current market conditions for honey and other commodities.

There is little doubt that the dairy support program has misdirected resources. Dairy farmers are responding to rising milk support prices rather than actual signals in the marketplace. This has led to program costs in excess of $2 billion per year. Contributing to the incentives for additional milk production has been the low economic returns in grain crops and beef cattle.

In general farm programs will be more successful in achieving their goals if they operate and function in a similar direction with commercial market signals. Administrative flexibility is needed to provide adjustment in target prices and loan rates, among other parameters, as guided by the reality of actual market conditions and within the limits established by laws. Since foreign markets are of considerable importance to the economic welfare of U.S. agribusiness and the national balance of payments, we should strive to maintain competitiveness in world markets. We should not, however, permit our efficient farm production system to become dismantled by ruinous international market warfare or a complete withdrawal of government intervention under periods of serious economic distress. The welfare of future generations of Americans must also be weighed into our current policies and programs.

The present efficiency and productivity of the farm production system is largely the product of previous investments in resident instruction, research, and extension of the Land Grant University System and the U.S. Department of Agriculture. I am disappointed that the 1984 Fiscal Budget does not provide even a meager increase for the Cooperative State Research Service and the Extension Service. There is ample evidence that societal returns for investment in these activities are at least 50 percent per annum. Most of these societal returns are earned by consumers. Since every American is a consumer of foods, the returns from such activities are shared by all Americans.

In my view one of the most neglected areas of research and education in our American society is the agricultural and food system beyond the farm gate. There are several reasons for public investment in the marketing and distribution system. First, farmers presently have a greater need for assistance with marketing strategies and financial management than production technology. Secondly, productivity growth of the food marketing and distribution sector of the U.S. economy has performed poorly relative to on-farm productivity. Thirdly, increases in food marketing and distribution costs have contributed substantially to the inflationary spiral in the United States since 1972. Fourth, the marketing margin represents 65 percent of retail food costs and this margin is enlarging over time. Fifth, private sector research and development in the food system beyond the farm gate has become increasingly oriented toward product proliferation and market promotions as opposed to improving the productivity and efficiency of the system. In my Presidential

Address before the Annual Meeting of the American Agricultural Economics Association, I proposed that the Congress of the United States promote the general welfare, reduce inflation, and improve productivity of its agricultural and food resources by enacting special funding for food systems research and education. The aim of the legislation would be to develop new technologies and management efficiencies beyond the farm gate via a coordinated effort among the Land Grant Universities, U.S. Department of Agriculture, and other appropriate agencies and institutions (Polopolus). Productivity growth and marketing efficiency require increased attention in such areas as postharvest handling, processing, raw product assembly, transportation at various stages, wholesaling, storage, retailing, food service, exporting, importing, and pricing at all levels. The new age of computer technologies also provides opportunities for improving product and input market information and thereby pricing and marketing efficiencies.

Of particular importance to U.S. agriculture is the future direction of international trade policy. The agriculture of the United States, as well as Florida, has experienced increased integration with the world economy over the past decade. One consequence of this internationalization has been the increased vulnerability of domestic agriculture to international events. Financial markets in London and Tokyo influence the price U.S. farmers pay for borrowed capital. Political decisions in the Middle East and around the world may determine the price of fuel, fertilizer, and pesticides that are vital to a farmer in Citra, Florida or elsewhere.

Diplomatic relationships between countries may also change and affect agricultural trade. Instability of agricultural trade will continue to be a major source of uncertainty for agricultural producers.

Exchange rates are also of considerable importance to U.S. agriculture. A strong dollar tends to hurt American producers because it makes it more difficult to export commodities. A strong dollar also adversely affects many producers, particularly in Florida, because it invites additional competitive imports of citrus, vegetables, ornamentals, and other commodities.

Tariff and nontariff barriers of many countries throughout the world offer stiff obstacles to export market expansion of U.S. agriculture. As an example of these barriers, the European Economic Community limits the export market potential of the Florida citrus industry by providing preferential duties for Algeria, Morocco, Israel, and Tunisia for imports of orange and grapefruit juices into the Common Market. The ad valorem duty rate for Florida products is approximately three times the duty rate for products from these preferred countries. Also, Japan, which produces no grapefruit, imposes a high tariff on grapefruit juice amounting to about 25 percent of value. In addition to the tariff, Japan limits the total volume of grapefruit juice with a global quota of a restrictive level. Similar tariff levels and quotas apply for orange juice imports to Japan.

There is also considerable interest in Florida agriculture regarding the likely impact of President Reagan's Caribbean Basin Initiative (CBI). The program seeks to promote economic development in designated countries of Central America and the Caribbean via a package of trade, aid, and investment. While the bill has not yet been approved by the Congress, serious doubts exist as to the ability of the Caribbean Basin Initiative to achieve its developmental objectives. Measures that encourage domestic economic policy changes in the basin countries may be a better alternative to the CBI. A preliminary assessment of the program's impact on Florida's agriculture suggests only modest effects (Pagoulatos). Monitoring of the rule of origin provision to minimize transshipments from non-CBI countries is recommended, as is the need to prevent the introduction of foreign plant and animal pests and diseases from imports from the basin region. It is highly recommended that funds be made available to assess the economic impact of the proposed Caribbean Basin Initiative on the agricultural sectors of the recipient countries, as well as that of the United States, before extensive commitment of U.S. funds for aid and investment.

*Comments on an earlier draft by the following colleagues at the University of Florida are gratefully acknowledged: Evan Drummond, John Gordon, Max Langham, David Mulkey, and Emilio Pagoulatos.

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Chairman DOMENICI. Mr. Anderson, you may proceed.

STATEMENT OF ROBERT O. ANDERSON, CHAIRMAN OF THE BOARD, ATLANTIC RICHFIELD CO.

Mr. ANDERSON. Thank you, Mr. Chairman.

I am sure I share the distress that we all feel when we look at the estimated budget deficits, particularly in an economic climate such as this, and realize that they are inflationary. They will undoubtedly push the economy in the wrong direction. On the other hand, bringing a budget into line is an enormous problem.

Talk of recovery is in the air. As Chairman Paul Volcker of the Federal Reserve said, there are a few crocuses in the spring, but a few crocuses do not make a summer. I have a few reservations about, one, the size of the recovery and speed at which it may be undertaking.

SIDE EFFECT OF WORLD MONETARY POLICY

I would like to direct my comments today on a factor that I think has been overlooked. It has had a tremendous impact on agriculture. If it continues in the direction it is going, I think it could stop any recovery and greatly exacerbate our present budget shortfall. This is the side effect of world monetary policy, particularly U.S. monetary policy. In 1971 we abandoned the so-called gold exchange standard, where principal currencies had fixed relationships with one another so everyone knew from one day to the next pretty much what their money cost in other currencies.

In 1973 we officially floated the dollar, which meant that we let it seek its own value in world trade. During the 1970's it drifted downward in value. I think some tourists were embarrassed to find their travelers checks not happily received in certain countries in Europe and elsewhere but it encouraged exports. But in 1979 the Federal Reserve stepped up to the enormous task of trying to bring inflation down through monetary policy. This changed the dollar's value very radically.

In October 1979, the Federal Reserve adopted a relatively highly restrictive monetary policy and cut down very drastically on the rate in which money was being introduced into the system. Since then, the dollar has drifted upward at a rate that today the value of the dollar, in my opinion, can only be referred to as the super dollar. It has risen so high that today it constitutes a major, 40 or 50 percent, equivalent of a tariff barrier on exports, whether it is automobiles, steel, farm products, or anything else. Looking from the other side, it is a subsidy to the foreign producer who sells into our country.

So, we have created in the last 4 years at the same time we have been hoping to bring about an economic recovery, a system of economic depressants that I think are working very much against the objectives we are trying to reach.

AMERICAN FARMER UNDER SEVERE PRESSURE

It would be difficult to say how much of our present unemployment is due to the strong dollar, but I can assure you in my opinion it is a very significant part of it. The American farmer, at $3.40

for his wheat, converted into today's dollars, really sells in the world market for $5 or $6 a bushel. He does not get it, but the foreign buyer pays a penalty to buy it and we are the supplier of last resort.

Conversely, the foreign producer of hams, anything else, a number of agricultural products, can bring his product in here on a very attractive basis. It is almost a subsidy.

If you go to a supermarket today, just look at the shelves and the number of new foreign food products that are on those shelves. The shelf space for foreign food is increasing. The American farmer is under the most severe pressure he has been since 1932.

Oddly enough, the farmers who are being hit the hardest are very often our youngest, our smartest, and our most highly productive farmers. Normally, not having capital to buy large amounts of land, they lease land. They put all of their capital and their earnings into equipment, very expensive, very modern, very efficient equipment. As the carrying costs through higher interest rates have gone up, farm incomes have gone down. This particular group of very efficient, very effective young farmers are being squeezed out via bankruptcy.

As we look at the rest of the world, we criticize what we say are the subsidies in Europe and in Japan, we have to realize that those countries made a conscious decision a good many years ago to try to be very supportive of their agricultural sector. This was not done because of philanthropy or good will. It was done for a very simple basic desire to keep a balance between the rural and the urban population. They realize that, if farm prices drifted too low, it would simply drive the farmers, the people out of the rural sectors and into the urban areas and exacerbate social problems in the cities.

AGRICULTURAL SYSTEM IN TRUE JEOPARDY

During the 1950's and 1960's and the 1970's, our consumer oriented agricultural policies produced food at very low prices. We effectively drove the small farmer off of the farm. Many of them are in the big cities today. We created a migration of population in the millions in this country, a great number from the South, from the small farms that moved into the urban areas. We are dislocating a large number of farmers today.

This spring is probably the most difficult spring that many farmers have experienced in their lifetime. Those in debt are having difficulty getting the money to do spring plowing. The less fortunate ones are facing foreclosures.

What has been the basic underlying strength of this country, our American agricultural system, is in true jeopardy. It is in jeopardy from our own dollar.

The answer is, unfortunately, not simple because the way to bring the dollar down in value is through systems or changes in monetary policy that, unfortunately, involve some inflationary risk. But the super strong dollar has made its impact in Detroit. It has made its impact in Pittsburgh. There is barely a large mine left in the United States operating because it is much cheaper to produce abroad today than it is here.

We are talking of import protection to protect the domestic producer. In effect, we are talking about import tariffs to protect ourselves from our own money because the dollar has become a formidable barrier to the domestic producer.

LIQUIDITY CRISIS CREATED

We have also created other problems by making this country a very attractive place for investment. We have brought money in from all over the world, creating a liquidity crisis in many countries throughout the world. While we can look at possibly a recovery, a modest recovery, in my opinion, this spring, most of the world is still clearly in a recessionary mode. The lack of liquidity in Third World countries is particularly difficult. There are certain dollar needs that they must have and the dollar makes them extremely expensive. Mexico is probably the outstanding example of a country that has a very wide difference in its currency and its dollar needs. People and countries who have dollar-denominated payments or debts must convert into a very expensive exchange.

We are the supplier of last resort because our money is so expensive. Until the dollar is restored into what I would call a proper relationship, an alinement, with world currency, I am not very hopeful as to the economic recovery nor any substantial reduction in our budgetary shortfall.

Each time we lose a product, we lose jobs. We are almost on our way to finding we can buy everything cheaper abroad than we can in this country. We have to realize we must have jobs in this country. Four years of zero growth have created social conditions that I think are not only undesirable, almost unconscionable.

We simply have to realize we need a productive society if we are going to provide the goods and the services that we Americans believe in.

As I said, the options are not easy. The unfortunate thing is, as the deficit goes up, the Federal Reserve feels constrained to renew its efforts; and I think the two are just tugging in opposite directions. The Federal Reserve has done a remarkable job of bringing inflation down, but in the long run until we can get a budget that is in somewhat better balance, the outlook is far from what it should be. Thank you.

Chairman DOMENICI. Mr. Anderson, I think you know that your comments with regard to the super dollar, sometimes referred to as the muscular dollar, are in the Congressional Record. I do want to make your speech, "The Muscular Dollar: An Economic Liability," a part of the record here at this point. I assume you have said some of the same things and some that are not in the speech, as I recall, you made today.

THE MUSCULAR DOLLAR: AN ECONOMIC LIABILITY

(By Robert O. Anderson)

The greatest single problem facing the United States economy—and, too, the economies of much of the rest of the world—is the extraordinary global strength of the dollar. In the last 12 months alone, the dollar has appreciated 30 to 40 per cent against most world currencies. This has been wonderful for American tourists abroad but disastrous for farmers and automotive and steel workers at home.

To take an obvious example, a two-million yen Japanese car that sold in San Francisco for $10,000 a year ago sells for $8,000 now. Detroit had enough problems competing against the $10,000 car; imagine what the outlook is with $8,000 cars. As a result, Congress is talking about trade barriers to protect our industry from the strength of our own currency—a scene straight from "Alice in Wonderland."

Trade barriers are not the answer; indeed, there are no automatic answers. Obviously, the excessively high interest rates prevailing in this country are part of the problem because they make dollar investments enormously attractive and thus sustain the dollar at an artificially high level. At the same time, the role of the Federal Reserve system in determining the value of world currencies merits careful examination: The impact of its decisions is no longer merely domestic but worldwide. In any case, the world monetary system—especially the dollar's role—merits immediate re-examination.

Americans have not yet come to terms with the dual role of the dollar: as American domestic currency, and, more importantly, as the world's principle reserve currency. The two are inextricably linked. To combat inflation, we have pursued an artificially restrictive monetary policy. But the effect has been to produce extremely high interest rates that create economic stress throughout the third world and also dry up a large part of the world's liquidity.

After World War II, it became evident that England could perform no longer as the world's central banker, and the United States, in spite of a comparatively provincial background, agreed to accept the role of world leadership that such a responsibility entailed. In signing the Bretton Woods agreement, we agreed to fix our currency as the base for all of the world's currencies and to maintain a gold exchange standard. This did not mean one could take money and turn it in for gold; it did mean that a foreign central bank could present dollars in its possession and receive gold. In effect, all the world's major currencies were tied into one central reference point, the gold-backed dollar.

But in 1971, America no longer had enough gold to honor these gold exchange commitments and announced that it would unilaterally suspend the gold-exchange standard. Domestically this meant little because one could not exchange dollars for gold, but for the rest of the world this was an earthquake.

Shortly afterward, the United States announced that the dollar would float, changing its value from day to day, up or down as circumstances dictated, instead of maintaining fixed exchanges whereby one knew exactly how many units of money would buy a dollar. It floated downward in the 1970's, creating advantageous marketing conditions for this country, and the free price of gold rose to nearly $800 per ounce. Three years ago, the Federal Reserve gave up its traditional method of controlling the dollar based on the monitoring of interest-rate ranges, and managed the dollar in an absolute sense based on the money supply—a procedure that it has now abandoned. On a constant-dollar basis, there was little or no increase in our domestic money supply during the three years.

As interest rates went sharply up, dollars poured in at their increased value. Thus, America drained the world's liquidity by retrieving dollars and converting noninterest-bearing notes, which are dollar bills, into fixed-term, high-yielding Government securities. Meanwhile, high interest rates have made it costly to hold gold, and the resulting sell-off has driven down the price of gold by more than 40 percent. This means a reduction of about $500 billion in foreign official reserves plus an additional $250 billion in private hands, much of it held abroad—a further major reduction in global liquidity.

For both private and official borrowers of "dollar-denominated debt," this has created a real crisis. As their own currencies have declined in value, debt liabilities as expressed in their currencies have in many cases more than doubled while interest rates over the last three years have done somewhat the same. As a result, foreign borrowers (Mexico is a classic case) are suddenly confronted with carrying charges on their debt that are from three to as much as five or six times more than contemplated at the time the debt was incurred.

The effects are especially pernicious in third-world countries, which have suffered a far greater change in the value of the dollar than the 30 to 40 percent occurring in Europe. In many parts of the world, crude oil sells for the equivalent of $50 to $60 per barrel in terms of internal currency. Yet when the ability of third-world countries to purchase dollar-denominated imports begins to shrink, as the value of their currencies declines relative to ours, we must number ourselves among the losers.

Our exports of cars, steel, and commodities have been particularly hard hit. Take wheat. Our $3.30 per bushel wheat is priced to the foreign buyer at $5 or $6 per bushel, while his products enter our market at 20 to 30 percent less than they were 18 months ago. The cost of producing copper in Chile, for example, in terms of United States currency, has dropped from 73 cents to 49 cents a pound during the past year. This places the Chilean copper industry in a profitable position at the very moment when every major copper deposit in the United States is under study for complete shutdown. No amount of increased productivity at home can overcome a handicap of this dimension. As the dollar continues to strengthen, we are locked into rising unemployment and further deterioration in trade and fiscal balances. In effect, we have created an export barrier for our own products—by inadvertently making all the world's currencies extremely cheap and our own extremely dear.

Until we address ourselves to the realities of today's dual monetary system, and its impact on trade, and the disadvantage that accrues to our country under current restrictive practices, we will have problems. Domestic monetarism simply does not work in our highly complex international world.

Chairman DOMENICI. Let me just ask you one question, and we will proceed quickly.

FEDERAL RESERVE BOARD RECOGNIZES PROBLEM

Have you looked at the Federal Reserve Board's activities since around July of last year? Are they moving in the direction that you are suggesting by way of your testimony here?

Mr. ANDERSON. I think everything indicates that they now recognize that this is a very grave problem. I think they are trying to do what they can to bring interest rates down. They also are trying to bring the dollar down. It is unfortunate that the dollar appears to be irresistible to pressure to drive it down. It is up again today.

Political instability drives money to this country and puts demand on the dollar. With a balance-of-payments deficit this year that may be as high as $80 billion, normally you would expect the currency to drop off radically in value. But, in spite of it being generally known that we are going to run an extremely high deficit in our balance of payments, the dollar is still strong.

I think it is going to take some major effort to bring the dollar in line. Now, we should not have a weak dollar. We should have a healthy dollar that is on a reasonable parity with other currency. What we have done is to create economic conditions that simply help every other exporter in the world and penalize our own domestic producer.

Senator EXON. Mr. Anderson, I appreciate very much your testimony. We hear and talk here all the time about theory. It was brought home to me within the last 30 days with regard to the Mexican situation that you mentioned just a few minutes ago, what the strong dollar is doing, and what I think is the disastrous effect that it is having. It was brought home to me when I went across the border from a Texas community into a Mexican city. Five of us went over there one evening to a very fine restaurant. The waiters were in tuxedos, the whole works, candle light, everything. Five of us had a full Mexican dinner which was excellent. The other four members of the party had drinks. I didn't, of course, you understand. They had dessert and I didn't, you understand.

Chairman DOMENICI. Did you drink any tea?

Senator EXON. No, just water, even in Mexico. The point is that when the bill came, it was $27.50 for the five of us. I guess that brought home to me more than anything could how just going across a river and seeing that difference is something that is obviously going to cause us untold difficulty. And it is another reason why we have such an influx of Mexican nationals into our country today. Even if they get taken back—and most of them do not—if they can be here for a few days and earn $20 or $30 at odd jobs, they go back to Mexico relatively rich. I think that just highlights part of your testimony.

Mr. ANDERSON. That $20 is $100 when they get home.

Senator EXON. Right.

Mr. ANDERSON. To me the classic example is Caterpillar Tractor. Ten years ago, even 5 years ago, no construction job anywhere in the world with any size would go on its way without some Caterpillar equipment, tractors, bulldozers, what have you. This morning I was held up in the street and looked out, and there was a very large piece of earth-moving equipment with a Japanese stamp on it. We cannot compete here in our own country.

INFLATION MAY BE THE PRICE WE HAVE TO PAY

Chairman DOMENICI. Before we go to the next witness, I just want to go ahead and ask a question of you, Bob. It seems to me that you are suggesting that we are in a catch-22. We hear from those that say we can't do this or that because we risk some inflation. It seems to me that you are almost saying that inflation may be among the lesser risks that you see for the United States to get out of the catch-22. Do I read you right?

Mr. ANDERSON. Yes, I think it may be the price we have to pay to get out of the dilemma we are in. We have a very unacceptable level of unemployment. We are losing ground as a producing country. As a matter of fact, the real irony of it is that while we have a very high defense budget we are still having a lot of difficulty providing the guns and the butter our society would like to have. But we are doing a tremendous job of liquidating our industrial base. Heavy industry is leaving this country, and that is our real defense system. The real line of defense of this country has been its enormous industrial capability and the fact that it can respond to tremendous emergencies. That is what pulled us through World War II. Where we are headed, we are going to be a nation of TV repairmen.

Chairman DOMENICI. And information gatherers.

Mr. ANDERSON. Yes.

Senator EXON. I would say that maybe that is true, but, if you read the newspaper this morning, Pac Man is even leaving us. It is possible that maybe we will not even have that, Mr. Anderson.

Chairman DOMENICI. I have one further question, Mr. Anderson. In terms of the value of the dollar, are you suggesting that some totally different tools might have to be made available to the monetary system? Or are you suggesting that the tools presently at the disposal of the Federal Reserve Chairman for increasing money supply and discount rates are sufficient?

COMPETITIVELY PRICE THE DOLLAR

Mr. ANDERSON. Well, it could be done that way. I do not want to try to second-guess or tell the Federal Reserve how to do it. I think we may declare that we would defensively price the dollar. You see, we talk about our prices not being competitive, nontariff barriers and what not. We have created the biggest one with our own currency. We should say we are going to competitively price the dollar, and we will keep it in line with other currencies, and we will decide what is in line and take the necessary steps to effect it.

I would say, generally speaking, we are 30 to 40 percent overpriced at a minimum in terms of other currencies in the world. I am glad there is no one here from Japan; they would fall out of the chair. But that is literally what it is going to take to make this country competitive to get this show back on the road. Now, if we made that statement of long-term policy, that over a period of years we would defensively price the dollar, I think it would at least get people's attention that we are not sleeping at the switch.

Chairman DOMENICI. I wonder if you would mind, Senator Exon, if we took a 5-minute recess. We will be in recess for 5 minutes.

[Recess taken.]

Chairman DOMENICI. Dr. Johnson, we are pleased to hear from you at this point.

STATEMENT OF D. GALE JOHNSON, CHAIRMAN, DEPARTMENT OF ECONOMICS, UNIVERSITY OF CHICAGO

Dr. JOHNSON. Thank you very much, Senator.

After listening to the previous three presentations, I almost think I am an outward-bound optimist compared to what we have been hearing, though in many ways I agree pretty much with what has been said. But perhaps I will try to put some of the same things in a slightly different light.

I do agree that the change in the value of the dollar that has happened particularly since mid-1980 has had a significant negative impact on the level of agricultural prices in the United States. For those products that we export, some work that I have done in the last several months indicates that, had the dollar stayed at the same value relative to the other currencies of the countries with which we trade as it had in mid-1980, farm prices would have been roughly 15 percent higher in dollars than they have been in the past several months. This would, of course, have made a very significant difference in agricultural outlook. In fact, I suspect that, had that been true, we would not be here today, if the level of farm prices of the major crops were 15 percent higher than they are.

In that regard, I agree with Mr. Anderson and Mr. Polopolus that the increase in the value of the dollar has had significant impacts directly upon agriculture in addition to whatever other impacts it has had through relationship to employment and perhaps lengthening the recession somewhat. However, in terms of looking more directly at agricultural policy, I am going to put the emphasis in somewhat of a different direction, though perhaps the first part of my remarks will also be considered to be almost equally if not more pessimistic than what has been said before.

AGRICULTURE SUBJECT TO SIGNIFICANT INSTABILITY

I think it is important to be recognized in establishing agricultural policy that the long-term trend in the prices of the major crop products particularly, not so much livestock but crop products—and by that I mean the feed grains, the wheat, cotton, and products of that importance—is either stable, after you adjust for inflation, or slightly downward Since World War II, the prices of the major crop products have declined, after you take into account the effects of inflation. I see nothing in the rest of this decade or perhaps even the rest of this century that will change that. That does not mean that prices will not rise from their current low levels. I think we need to recognize and the measures that we take need to recognize that American agriculture is subject to significant instability and that the present situation is to some considerable degree a temporary one. It is in some ways perhaps similar to that which affected American agriculture in 1977. Fortunately, the 1977 downturn in prices and incomes lasted but 1 year. The present one has already lasted longer than that. I agree that it is likely to last even further.

During the 1970's, U.S. agricultural output expanded and expanded significantly at a time our domestic demand grew hardly at all. Almost all of the increase in demand for agricultural products that occurred during the 1970's was foreign demand, export demand. The output of American agriculture responded to what was considered to be a long-run threat to the world's food supplies, which actually after a year or two did not really materialize. So, we increased our productive capacity significantly during the 1970's. The quantity of the inputs used in agriculture at the end of the 1970's was some 10 percent greater than at the beginning of the 1970's.

Up until then, for the previous two or three decades, the decline in labor had just been offset by the increase in nonfarm inputs, basically. But during the 1970's very little labor left agriculture, and increased investment in nonfarm inputs came in. So, our productive capacity, not only because of increasing productivity but because of increasing inputs, increased during the 1970's.

In fact, it was partly a matter of governmental policy during the 1970's to encourage the expansion of agricultural output. As late as 1980 the then Secretary of Agriculture said we were going to have food shortages during the 1980's. I think to some degree farmers were misled by governmental forecasts of the prospects for farm crops particularly.

My view is that the past errors should not be compounded. That is really the basis of the remaining of my comments.

GRADUALLY ELIMINATE POLICY MEASURES

So, the second major area I would say is that the policy measures that we have that encourage expanded farm output should be gradually eliminated. Our basic objective should be to do those things to assist farmers to adjust to the changing economic conditions. We should not through high price supports and other forms of subsidies induce farmers to produce more than can be sold profitably to the prices that will exist in the market.

At the present time and in recent years, we have had a number of programs that actually encourage the expansion of farm production at a time we do not need more farm production, at a time output is too large relative to the demand for it. I would include three or four different measures or programs that we have, all of which also affect the underlying purposes and objectives of this committee. In other words, they cost money; most of them cost money. Certainly the target prices and deficiency payments that we have have been a factor in providing farmers with an incentive to expand output. Also, as the charts behind you there indicate, they involve a great deal of money. The commodity stabilization programs grow out of the impact of target prices and loan rates.

NO SYSTEMATIC RELATIONSHIP BETWEEN TARGET PRICES AND LOAN RATES

One point I do make in my written testimony and that I would like to repeat here is that there is no systematic relationship between the target prices and the loan rates in our present programs. In the case of corn, the target price has been 8 percent above the loan rate. Wheat has been 18 percent. In the case of cotton, it has been 33 percent. And I can see absolutely no basis for these differentiations. Particularly the higher ones are definitely output encouraging.

Chairman DOMENICI. The only rationale is politics.

Dr. JOHNSON. I know, I know. I did not want to say that. Thank you, though.

Chairman DOMENICI. You can be awfully frank with us.

Dr. JOHNSON. There are other programs that subsidize agricultural output. We have a number of credit programs, some of which are now in significant difficulty because money seems to be come by so easily, particularly some aspects of the operations of Farmers Home Administration.

The disaster payments program, which now fortunately is, I think, no longer with us—I think it was abolished last year—operated to induce people to farm in marginal areas. Without the backstopping of the disaster payments, we probably would have had the land remaining or returning to pasture rather than wheat and other crops. We now have replaced that by a crop insurance program, but it is also heavily subsidized. The premiums will only pay about half of the cost of the crop insurance program. In addition to that, we do have high price supports for dairy, for peanuts, for sugar, and long-staple cotton.

I think one aspect of our governmental policy including budget policy should be to look at those programs that do encourage farmers to produce more. When we do that, we mislead them and we create problems. We also create the need for further expenditures.

NO ADJUSTMENTS MADE OVER THE YEARS

My final comments are in the area of trade liberalization. This has also been discussed by the previous witnesses here. I want to argue that some of the problems with agricultural exports are related to our own programs.

We criticize the Japanese a great deal about their restraints on the imports of agricultural products. We criticize the European Community on similar grounds. But we have done nothing basically over the past three decades to eliminate those of our own measures that inhibit'the importation of agricultural products such as sugar, beef, and dairy products. These programs are essentially the same today as they were 20 years ago.

I argue in a paper that I think has been made a part of the record here [1] that there would be great difficulties on Capitol Hill and on Independence Avenue and on Pennsylvania Avenue if someone really offered us free trade in agricultural products, if the Japanese and the European Community did that, because we would not be prepared to take them up on the offer. We have done absolutely nothing over the years to accommodate to the need to adjust in these sectors. That is the first point I make.

Second, I think it needs to be recognized that the limitations that we have imposed as a country on the importations of autos, of television sets, of motorcycles, and a variety of other products do have a negative impact on our ability to export agricultural products.

Chairman DOMENICI. Would you state that again please?

LIMITATIONS ON IMPORTS AFFECT ABILITY TO EXPORT

Dr. JOHNSON. The limitations on the imports of automobiles, of television sets, of motorcylces, and of textile products have an adverse effect upon our ability to export agricultural products.

Take our limitations on textiles, the so-called textile agreements that we have, voluntary textile agreement. One of the most important growing markets for our agricultural products has been the middle income, rapidly developing countries, which are primarily the major sources of textile products, which we attempt to keep out. Their ability to earn dollars depends very largely upon their ability to export products of this kind. We have limited their ability to export textile products to us. We have limited their ability to buy our agricultural products.

The recent difficulty with the People's Republic of China is only the most spectacular of the interrelationships between what we import and what we can export.

I would hope that we will move in the direction, and I know it is not easy, and I know it cannot happen immediately. If we do have a recovery that lasts a significant period of time, it would be much easier to eliminate our barriers on the importation of some of these products and thus aid in expanding the exports of agricultural products.

I will stop with that. Thank you very much.

Chairman DOMENICI. Thank you, Dr. Johnson.

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[1] See p. 460.

PREPARED TESTIMONY

Senate Budget Committee

D. Gale Johnson
The University of Chicago

Federal farm programs and the budget expenditures associated with those programs must be designed to function in a situation in which the long run trend of agricultural prices for the major crops are trending downward, after adjustment for inflation. For some major grains, in particular wheat and barley, the downward trend has existed for more than a century; for others such as corn, cotton and rice, the period of declining prices has persisted since the first world war (see table for wheat and corn export prices).

Declining real prices mean that supply has been increasing at a slightly more rapid rate than demand. Until recently the increase in supply has reflected improvements in productivity--higher output per unit of land, labor and capital--and the aggregate resources engaged in agriculture remained approximately constant from about 1920 through 1975. Significant declines in labor were offset by increased capital investment and current purchased inputs. But since 1972 farm employment has declined hardly at all and purchased current inputs and investment have continued to increase and the total quantity of resources used in agriculture has increased by perhaps as much as 8 to 10 percent. If this increase in total inputs had not occurred during the last half of the 1970s and the early years of the 1980s, our agriculture would be in a much better economic position that it now is.

Farmers were misled by the emphasis that was so common during the last half of the 1970s on the possibility of world food shortages and rising food prices. As late as 1980 the then Secretary of Agriculture said that world demand growth would outpace world supply growth for food. Target prices for wheat and barley were high enough to encourage production expansion; the disaster payments program encouraged farming in marginal areas. High dairy price supports after 1976 added to demand for feed grains.

But whatever the errors of the past, we should not compound them for the future. The guiding principle of agricultural policy should be that no steps should be taken that encourages farmers to expand output above that called for by prices that equate supply and demand. We currently have far too many programs that do encourage output expansion. Each of these programs should be either dropped or modified to eliminate the effects upon output.

An important source of federal expenditures on agriculture is the deficiency payment programs for the grains and cotton. These deficiency payments have the effect of encouraging increased production of the grains, especially wheat and barley, and of cotton. It is true that the deficiency payments come into force only when a farmer participates in a set-aside program, but for many farmers meeting the requirements of the minimum required set-aside has little effect upon the level of output.

There is no systematic relationship between the target and loan rates for the various crops. The target prices for wheat, cotton and rice are substantially higher relative to the loan rates than is true for corn. For 1983 the corn target price is 8 percent higher than the loan rate, while the wheat target price is 18 percent above the loan rate. The cotton target price is 33 percent above the loan rate, and the same percentage difference prevails for rice. If the loan rates varied significantly from expected long run level of market prices for the various products, some difference in the ratio of target prices to loan rates could be justified. But this seems not to be the case. The loan rates for corn, wheat and cotton, for example, have each resulted in substantial stock accumulations from the 1981 and 1982 crops. Stock levels are high, but there seems to be nothing abnormal about their relative levels.

Target prices should be set at reasonably uniform percentages of loan rates and the recent relationship between target and loan rates for corn seem more appropriate than the similar relationships for wheat, cotton and rice. If this is done, there will be a modest reduction in the short run budgetary costs of farm programs but the longer run effect of giving farmers more appropriate price signals would be more important. If target prices are kept at their current levels, adjusted for inflation, I have little doubt that output will continue to grow at a faster rate than demand and there will be a continuing need for large budgetary expenditures.

There are other governmental programs that encourage a higher level of farm output than can be justified on the basis of market demand and supply. Subsidized credit encourages increased production. The implicit subsidies in the farmer-held reserve program are substantial; over a period of three years the governmental costs in terms of storage payments and interest foregone amount to almost half of the current loan rate on corn.

For years the disaster payments program encouraged production in marginal areas. Some part of the expansion of wheat and other grain area in the drier areas of the Great Plains occurred as a result of the reduction in risk resulting from the availability of the disaster payments. While the disaster payments program is now being replaced by a crop insurance program, it must be noted that the crop insurance program will also involve substantial subsidies and thus will have some small effect in encouraging added production.

There is a tendency, I fear, to assume that because the output effects of each one of the measures that I have noted are relatively small, it makes little difference if there is a subsidized crop insurance program or subsidies for storing grain or subsidized credit programs. But this line of argument ignores the combined impact of these and many other programs upon farmers' decision concerning what to produce and how much to produce. It always needs to be recognized that a very slight difference between the growth of demand and supply of farm products can have, at least in the short run, a significant effect upon the prices a farmer receives. Thus even a minor output consequence of a single policy and budget decision, when combined with many other decisions almost all of which have a positive effect upon production, is important and needs to be given the most careful consideration. The only important exception to the output-increasing effects of most governmental farm expenditures is the set-aside and diversion programs for the major crops.

I would like to close my brief remarks by stating as clearly as I can that the prosperity of American agriculture depends upon growth in our export markets for agricultural products. As is well known, the output from two out of every five crop acres is exported. Agricultural export markets are being restricted by actions taken by other governments and by us. Our limitations on imports of autos, television sets, motorcycles, textiles and, yes, imports of peanuts, sugar and dairy products adversely affect the exports of our low cost agricultural products. Whenever we reduce our imports we are, in effect, placing a barrier against our exports, including agricultural products. I would hope that decisions, including budgetary decisions, that would contribute to liberalizing trade and that would improve our ability to expand our exports of agricultural products would be taken. Such a course of action would be in the interests of the vast majority of farmers and of all consumers.

Real Export Prices for Wheat and Corn, United States, Selected Years, 1910-1981[a]

(1967 $ per ton)

Calendar Years	Wheat	Corn
1910-1914	100	74
1925-1929	103	76
1930-1934	66	68
1935-1939	79	85
1945-1949	122	94
1950-1954	95	80
1955-1959	69	61
1960	65	53
1961	69	52
1962	70	52
1963	69	56
1964	69	57
1965	62	57
1966	62	56
1967	64	54
1968	60	48
1969	57	48
1970	53	52
1971	54	50
1972	54	46
1973	80	63
1974	110	79
1975	95	76
1976	80	64
1977	58	52
1978	61	50
1979	67	50
1980	66	50
1981	62	51

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[a] The export prices are export unit values; the price deflator is the U.S. wholesale price index. Source: U.S. Department of Commerce, *Statististical Abstract of the United States*, various issues.

Chairman **Domenici**. Doctor, you know that in the midst of all of these kinds of problems and without a recovery we did make a modest change in the milk program. Modest in the sense that there is still a sizable program, but significant from the standpoint of percentage reduction over what it would be this year had we not made it. I guess that does not mean anything from the standpoint of the overall picture that you are speaking of, that that reached some kind of fruition based on a lot of things aside from the general philosophy you have expressed, which I am sure was not behind it in toto, because there were very few changes made elsewhere that would indicate there is any general thrust in that direction.

I have a number of questions, but I want to proceed, unless you have one.

Senator **Exon**. Doctor, I was very interested in your testimony. If we are going to curtail our agricultural production, as you outline—and that is a line of reasoning, it is a line of argument at least—what do we do with the farmers? Are you suggesting that we are going to have to have a plan to have significantly less farmers, or the same number of farmers farming less land? Do you have any help for us in that area?

Dr. **Johnson**. I want to change the first part of your statement a little bit. I was not talking specifically about curtailing agricultural output. I was talking about not using artificial and subsidized means of inducing farmers to produce more.

Senator **Exon**. When you get through subtracting, what would happen?

MINIMIZE GOVERNMENT'S ROLE IN AGRICULTURE

Dr. **Johnson**. I would hope then that we would be in a situation in which the market prices most of the time would earn a reasonable return for the farmer for his resources. That is the long-run objective that we should have. And to minimize, though I am not saying eliminate entirely, I do not argue for that, minimize the role that the Government and Government subsidies play in directing our agriculture.

I am not opposed to the idea of price supports if they are set at levels that perhaps are effective only 1 year out of 3 or 4, most of the time allowing the market to allocate supplies between the various people who want to demand them. But, when we as a Government adopt measures that farmers respond to by expanding their output when there is no market for them, we are misleading them.

Senator **Exon**. The only thing I would say to that is that all my life I have heard this phrase, if we could just get Government off our back. Not for 1 moment do I believe, with all of the difficulties that we have today, from what Mr. Anderson said about the caterpillar program and other places, our automobile industry, our steel industry, indeed maybe our petroleum industry, I do not know if Government got off all their backs and we turned them loose how many of those industries would survive. But I happen to believe that, if the world truly were engaged in free trade, then there is one place where we would excel; and that indeed would be in agriculture.

I think the figures would back me up. There is no one, as has been testified to here this afternoon, who is more efficient in what they produce in quantity, in cost, or anything else, than the American farmer. But the problem is that there is no free trade today. If we accepted the thesis that you advance, then likewise would we not have to say but that could not happen without even more dire consequences to the family size farm producer today unless we could knock down the subsidies that are going on around the world today, in Japan, in the Economic Community, and elsewhere?

Your theory then, as I take it, must be predicated on the fact of getting much better arrangements than we presently have on world trade and getting back to the strong dollar that Mr. Anderson was talking about. Would not we have to have all of those things reasonably equal to make the theory that you present workable?

UNPREPARED FOR TRADE NEGOTIATIONS

Dr. JOHNSON. I am not arguing for unilateral change necessarily, unilateral changes on our side, but we should make changes in response to opportunities for reducing barriers elsewhere. But the point I perhaps did not make is that, when we look at how we have entered into trade negotiations for the last 20 years, we have never been prepared. And I was involved in preparations for the Kennedy round and for the Tokyo round. At no time in the preparation for those negotiations was there ever any serious consideration of what to do with our dairy program, what to do with sugar, what to do with peanuts. Not hardly any attention at all was seriously given to them.

That is really why I say that, if they offered that they would get rid of their import quotas, say the Japanese, I am not sure we would know how to respond because we really have not given it enough thought.

I agree with the point that the dollar simply does have to readjust itself to some degree. I do not know that I would argue it is 30 to 40 percent over, but a good 15 percent would make a big difference to American agriculture, a decline in value by 15 percent.

Senator EXON. Thank you.

Chairman DOMENICI. Thank you very much. Pete Davis?

STATEMENT OF L. E. DAVIS, PRESIDENT, NEW MEXICO FARM AND LIVESTOCK BUREAU

Mr. DAVIS. Thank you, Mr. Chairman.

I live in east central New Mexico near Clovis. I own and operate a wheat, feed grain, and cattle feeding farm, part irrigated and part dry land.

I would probably be more comfortable today driving a tractor or chasing a calf, but I sure appreciate the opportunity of being here and appearing here today as an active farmer and livestock producer and also as president of the New Mexico Farm and Livestock Bureau, which we are affiliated with the American Farm Bureau Federation.

My comments will be limited mainly to Federal agricultural policies, particularly the PIK program, as I view their impact on New

Mexico farmers and ranchers at this point. I will also comment on some trade barriers affecting U.S. agricultural exports.

Farmers in New Mexico are generally supportive of the payment in kind acreage reduction and export program. We believe that this will result in substantial reduction of stocks for all PIK commodities.

IMPLEMENT "CROP SWAP" PROGRAM

At our national convention held in Dallas last month, the Farm Bureau's voting delegates approved the following policy for 1983, and I would like to quote:

> We support implementation of a "crop swap" program in conjunction with an effective voluntary acreage reduction program for the 1983 and 1984 crops of wheat, feed grains, cotton, and rice to alleviate the problem of our present burdensome, price-depressing surpluses. A "crop swap" program should be:
>
> No. 1: viewed as a short term solution;
>
> No. 2: implemented in conjunction with an acreage reduction program which will provide adequate incentive to encourage producer participation so that supplies can be brought into line with demand;
>
> No. 3: implemented so that all payments will go only to bona fide producers;
>
> No. 4: structured in a manner that will enhance orderly marketing;
>
> No. 5: coupled with an incentive program for foreign buyers; and
>
> No. 6: implemented so that acres diverted under this program will not be grazed.

A market bonus plan, or the export PIK plan we are speaking of now, deserves some serious consideration for implementation this very year. We believe that such a program should be targeted to Third World markets, particularly those who have been affected by unfair trade practices of the Economic Community and to developing countries that have the potential for long-term market of ours.

At this time, I would like to direct my comments to agriculture's stake in international trade.

I cannot think of any time when trade problems have been so troublesome, the stakes for agriculture so high, the need so great, and our opportunities so obvious as they are today.

During this critical period, we continue to suffer the political aftermath of the grain embargo through changing world trade patterns and world lack of faith in American trade reliability.

Farm efforts to boost the U.S. image as a reliable trading partner took another downward turn when the administration placed sanctions against American and European firms supplying equipment for the Siberia-to-Europe gas pipeline.

In this past year, Farm Bureau has certainly been directly involved in trade-related actions from support for sanctity-of-contract legislation, which is very important, to strong moves against trade restrictions.

In the meantime, the long-term Soviet grains agreement has expired. The European Community stepped up its export subsidy programs. Congress began working on protectionist legislation. And Farm Bureau pressured for blended credit and other export financing programs.

At the same time, the world has endured a severe recession. Unemployment everywhere has been high. Farm prices have been low. And our grain bins are full with unsold bumper crops.

PROGRESS MADE BY TRADE EXPANSION TRIPS

Trade expansion trips this past year included a visit to Mexico and to Japan. There were also visits to capitals in Europe with appearances before officials of the European Economic Community.

In November, Bob Delano, our president, represented private sector agriculture as a member of the U.S. delegation to the ministerial meetings of GATT held in Geneva.

With regard to Farm Bureau's private trips to Japan and Europe, I was pleased to have had the opportunity of being a part of this group of State Farm Bureau presidents who participated in the trade expansion trip and the mission to Japan. We used the open and the friendly approach, showing appreciation to Japan, our No. 1 customer for farm products. There were no attempts made to make a deal with farm products separately or on a different basis than the products of any other industry.

We think we made progress with the Japanese during this trip. We feel like it was good.

Our message is that trade benefits everyone, that all consumers benefit from choice, that the only way to strong and lasting trade is through assuring mutual advantage, in other words a fair shake to everyone.

These messages from the United States were heard and understood. And that, again, I feel like was real good.

Also, I feel like the GATT, along with all of its problems, is the best trade safety device that exists. We just have to work harder to make it work.

Several interesting things have happened, both in Japan and Europe, in recent weeks.

Some of it occurred because of the tremendous media coverage that followed wherever our farm bureau groups went when they were visiting Japan. One of Japan's largest magazines worked with us to publish farm bureau and American farmers' views of restrictive Japanese trade practices. Increased recognition of the importance of United States-Japanese trade relations is reflected in a recent Japanese newspaper poll. Again, we think that is good.

PIK PROGRAM SHOULD NOT BE A PRICE-ENHANCING PROGRAM

In my view of the PIK program, the PIK program should be viewed as a stock reduction program and a program to reduce Government cost, not as a price-enhancing program but as a solution to long-term farm program problems. The world market will not accept higher commodity prices at this same time. Any effort to change the PIK program to a price-enhancing program will result in a loss in domestic and exporting markets and a failure to reduce the overall stock levels.

The PIK program for 1983 does not reduce carryover stocks to acceptable levels. Assuming no reductions in production due to adverse weather and no unexpected hazards that might come our way as far as producers are concerned and no unexpected increase in domestic or export use, some combination of acreage reduction programs and PIK programs probably will be needed again in 1984 and possibly 1985 before this will self-destruct perhaps, when we take care of the surplus that we have.

Government savings due to lower deficiency payments and lower storage and interest charges will be approximately $1.2 billion during the first year of the PIK program.

Remember this, that the U.S. farm sector is the most productive in the world. It has been the leading agricultural exporting nation. In spite of their productivity, or maybe because of it, America's farmers are in deep financial trouble. Our stored surpluses have depressed prices and slowed the growth of farm revenues, yet production cost continues to increase.

Our farmers, not to mention our taxpayers, are owed a way out of this surplus dilemma, a way to empty the storage bin, and get the food into empty stomachs.

Whether we recognize it or not, American agriculture is moving into a new area of economic realities and pressures. The past 2 or 3 years have been depressed for all of agriculture, with the cost of production higher on almost every commodity that we produce than the market price supports.

According to one large agricultural lender in my home county who typically finances the larger, more prosperous farmer, 10 to 15 percent made some profit this past year. About 60 percent lost money; 25 percent about broke even for the year. Now, bear in mind that that was of the better managed farms just taken at random in Clovis. It did not include any FHA borrowers.

Tenant farmers lost about one-third of their equity in 1981. This came from the county agent in my home county.

Even complimenting the USDA for coming up with this payment-in-kind program or crop swap, whatever you might want to call it, even those who might criticize the crop swap, what I have visited with the last 2 months, when asked to name something better, usually agree that the PIK program, coupled with an export program, can think of nothing better.

ORDERLY MARKETING IS IMPORTANT

Orderly marketing is one of the points, I think, that is real important to be made here because if the 5 months that is given that the farmer could market his grain at the time that he would normally market the crop coming from the farm, we feel like it would be much better than if the Government, say, dumped a tremendous amount of grain on the market any one place or any one time, which it certainly could disrupt the market at that price at that time.

Those agricultural producers and visiting with the lending agency, they have told me that those who have increased their position only through severe belt-tightening measures, not because of improving economic climates.

I could respond to some questioning on that as far as the agribusiness community is concerned that I have taken some time to take a survey of some implement and ag-related businesses in our county.

We cannot ignore the fact that as agriculture goes so goes the national economy. America's economic future depends on the well-being of our farmers. I need not remind you of the rippling effect on rural America of low commodity prices and high interest rates.

If trade is to be used as an economic tactic, it should be used positively. The more East and West come to depend on each other to satisfy their needs through trade, the less likely they are to come to blows. This policy, I realize, is not without economic risk. But considering how little there is to be gained from the opposite approach, the risks are worth taking.

Not only will a better agricultural economy enhance the farm-related businesses but the general economy of Main Street U.S.A. The recession started at the farm gate and has spread throughout the national economy. The end result, I feel, of this crop swap program could be and probably will be one of the main factors leading to the economic recovery of this Nation.

Our ability to produce is this Nation's wealth. Let us protect it. Thank you.

Chairman DOMENICI. Thank you.

REMARKS OF L. E. "PETE" DAVIS, FARMER/LIVESTOCK PRODUCER, CLOVIS, NEW MEXICO, TO THE SENATE BUDGET COMMITTEE - FEBRUARY 23, 1983

MY NAME IS L. E. "PETE" DAVIS. I LIVE IN EAST CENTRAL NEW MEXICO NEAR CLOVIS, AND I OWN AND OPERATE A WHEAT, FEED GRAIN AND CATTLE FEEDING FARM, PART IRRIGATED AND PART DRY LAND.

I APPRECIATE THIS OPPORTUNITY OF APPEARING HERE TODAY AS AN ACTIVE FARMER/LIVESTOCK PRODUCER AND AS PRESIDENT OF THE NEW MEXICO FARM AND LIVESTOCK BUREAU. OUR ORGANIZATION IS AN AFFILIATE OF THE AMERICAN FARM BUREAU FEDERATION AND IS THE STATE'S LARGEST AGRICULTURAL ORGANIZATION.

MY COMMENTS WILL BE LIMITED MAINLY TO FEDERAL AGRICULTURAL POLICIES, PARTICULARLY THE PIK PROGRAM, AS I VIEW THEIR IMPACT ON NEW MEXICO FARMERS AND RANCHERS, AND I WILL ALSO COMMENT ON TRADE BARRIERS AFFECTING UNITED STATES AGRICULTURAL EXPORTS.

FARMERS IN NEW MEXICO ARE IN GENERAL SUPPORTIVE OF THE PAYMENT IN KIND ACREAGE REDUCTION AND EXPORT PROGRAM. WE BELIEVE THAT THIS PROGRAM WILL RESULT IN SUBSTANIAL REDUCTION OF STOCKS FOR ALL PIK COMMODITIES AND 1983 AVERAGE PRICES FOR THESE COMMODITIES WILL REMAIN BASICALLY UNCHANGED FROM WHAT THEY WOULD HAVE BEEN WITHOUT PIK. OUR ANALYSIS CONCLUDES THAT REDUCED CASH OUTLAYS BY FARMERS BECAUSE OF AN OVERALL REDUCTION IN PLANTED ACRES WILL RESULT IN A NET FARM INCOME INCREASE OF $2.0 TO $2.5 BILLION DOLLARS. AT THE SAME TIME, A COMBINATION OF REDUCED DEFICIENCY PAYMENTS AND STORAGE COSTS COULD RESULT IN AN OVERALL FEDERAL BUDGET SAVINGS FOR THE FIRST YEAR OF $1.19 BILLION DOLLARS.

AT OUR NATIONAL CONVENTION HELD IN DALLAS, TEXAS LAST MONTH, FARM BUREAU'S VOTING DELEGATES APPROVED THE FOLLOWING POLICY FOR 1983:

> "WE SUPPORT IMPLEMENTATION OF A "CROP SWAP" PROGRAM IN CONJUNCTION WITH AN EFFECTIVE VOLUNTARY ACREAGE REDUCTION PROGRAM FOR THE 1983 AND 1984 CROPS OF WHEAT, FEED GRAINS, COTTON AND RICE TO ALLEVIATE THE PROBLEM OF OUR PRESENT BURDENSOME, PRICE-DEPRESSING SURPLUSES. A "CROP SWAP" PROGRAM SHOULD BE:
>
> NUMBER ONE: VIEWED AS A SHORT TERM SOLUTION;
> NUMBER TWO: IMPLEMENTED IN CONJUNCTION WITH AN ACREAGE REDUCTION PROGRAM WHICH WILL PROVIDE ADEQUATE INCENTIVE TO ENCOURAGE PRODUCER PARTICIPATION SO THAT SUPPLIES CAN BE BROUGHT INTO LINE WITH DEMAND;
> NUMBER THREE: IMPLEMENTED SO THAT ALL PAYMENTS WILL GO ONLY TO BONAFIDE PRODUCERS;
> NUMBER FOUR: STRUCTURED IN A MANNER THAT WILL ENHANCE ORDERLY MARKETING;
> NUMBER FIVE: COUPLED WITH AN INCENTIVE PROGRAM FOR FOREIGN BUYERS; AND
> NUMBER SIX: IMPLEMENTED SO THAT ACRES DIVERTED UNDER THIS PROGRAM WILL NOT BE GRAZED."

AN INCENTIVE PROGRAM FOR FOREIGN BUYERS SHOULD BE STRUCTURED SIMILAR TO THE PROVISIONS OF S.3074 AS INTRODUCED BY SENATOR COCHRAN DURING THE 97TH CONGRESS. WE BELIEVE THAT A "MARKET BONUS PLAN", OR AN "EXPORT PIK PROGRAM" DESERVES SERIOUS CONSIDERATION FOR IMPLEMENTATION THIS YEAR. WE BELIEVE THAT SUCH A PROGRAM SHOULD BE TARGETED TO THIRD WORLD MARKETS, PARTICULARLY THOSE WHICH HAVE BEEN AFFECTED BY UNFAIR TRADE PRACTICES OF THE EUROPEAN COMMUNITY AND TO DEVELOPING COUNTRIES THAT HAVE THE POTENTIAL FOR LONG-TERM MARKET DEMAND.

BECAUSE FARMERS HAVE ALREADY INCURRED MAJOR PORTIONS OF THE EXPENSES ASSOCIATED WITH THIS YEAR'S CROPS, WE COMMEND THE DECISION OF THE U.S.D.A. TO ALLOW GRAZING OF CONSERVATION USE ACREAGE, EXCEPT DURING THE SIX PRINCIPAL GRAZING MONTHS FOR LOCAL AREAS, AS A PART OF THE 1983 PIK PROGRAM. WITH THIS EXCEPTION, WE OPPOSE THE GRAZING OF ANY ACREAGE DIVERTED UNDER THE PIK PROGRAM, REFLECTING THE CONCERN OF OUR MEMBERS WHO ARE CATTLE PRODUCERS AND WHO BELIEVE THAT PERMITTING SUCH GRAZING WILL HAVE A NEGATIVE IMPACT ON THE CATTLE INDUSTRY.

DOMESTIC AND EXPORT UTILIZATION DURING THE 1983/1984 MARKETING YEAR WILL BE UNAFFECTED BY THE PIK PROGRAM. ENDING STOCKS WILL BE REDUCED FOR ALL FIVE COMMODITIES INVOLVED IN THE PIK PROGRAM. THE SEASON'S AVERAGE PRICES FOR THESE COMMODITIES WILL NOT BE HIGHER WITH THE PIK PROGRAM.

THE PIK PROGRAM SHOULD BE VIEWED AS A STOCK REDUCTION PROGRAM AND A PROGRAM TO REDUCE GOVERNMENT COSTS, NOT AS A PRICE ENHANCING PROGRAM AS A SOLUTION TO LONG TERM FARM PROGRAM PROBLEMS. THE WORLD MARKETS WILL NOT ACCEPT HIGHER COMMODITY PRICES AT THIS TIME AND ANY EFFORTS TO CHANGE THE PIK PROGRAM INTO A PRICE ENHANCING PROGRAM WILL RESULT IN A LOSS OF DOMESTIC AND EXPORT MARKETS AND A FAILURE TO REDUCE OVERALL STOCK LEVELS.

THE PIK PROGRAM FOR 1983 DOES NOT REDUCE CARRYOVER STOCKS TO ACCEPTABLE LEVELS. ASSUMING NO REDUCTIONS IN PRODUCTION DUE TO ADVERSE WEATHER AND NO UNEXPECTED INCREASE IN DOMESTIC OR EXPORT USE, SOME COMBINATION OF ACREAGE REDUCTION PROGRAMS AND PIK PROGRAMS WILL BE NEEDED AGAIN IN 1984 AND POSSIBLY 1985.

GOVERNMENT SAVINGS DUE TO LOWER DEFICIENCY PAYMENTS AND LOWER STORAGE AND INTEREST CHARGES WILL BE APPROXIMATELY $1.2 BILLION DOLLARS DURING THE FIRST YEAR OF THE PIK PROGRAM.

AT THIS TIME I WOULD LIKE TO DIRECT MY COMMENTS TO AGRICULTURE'S STAKE IN INTERNATIONAL TRADE.

I CANNOT THINK OF ANY TIME IN THE LAST QUARTER-CENTURY WHEN TRADE PROBLEMS HAVE BEEN SO TROUBLESOME, THE STAKES FOR AGRICULTURE SO HIGH, THE NEED SO GREAT, OR OUR OPPORTUNITIES SO OBVIOUS.

U.S. FARM TRADE HAS BEEN CENTRAL TO VIRTUALLY ALL OF THE TRADE TALKS AND ACTIONS IN GOVERNMENT AND OUTSIDE IT--FOR THE PAST 18 MONTHS. AND FARM BUREAU AS AN ORGANIZATION HAS BEEN CENTRAL TO VIRTUALLY ALL OF THE FARM TRADE ACTIONS TAKING PLACE.

DURING THIS CRITICAL PERIOD WE CONTINUE TO SUFFER THE POLITICAL AFTERMATH OF THE GRAIN EMBARGO THROUGH SHIFTED WORLD TRADING PATTERNS AND WORLD LACK OF FAITH IN AMERICAN TRADE RELIABILITY.

FARM EFFORTS TO BOOST THE U.S. IMAGE AS A RELIABLE TRADING PARTNER TOOK ANOTHER DOWNWARD TURN WHEN THE ADMINISTRATION PLACED SANCTIONS AGAINST AMERICAN AND EUROPEAN FIRMS SUPPLYING EQUIPMENT FOR THE SIBERIA-TO-EUROPE GAS PIPELINE.

IN THE PAST YEAR, FARM BUREAU HAS BEEN DIRECTLY INVOLVED IN ABOUT TWO DOZEN SIGNIFICANT TRADE RELATED ACTIONS FROM SUPPORT FOR SANCTITY-OF-CONTRACT LEGISLATION TO STRONG MOVES AGAINST JAPANESE TRADE RESTRICTIONS.

IN THE MEANTIME, THE LONG-TERM SOVIET GRAINS AGREEMENT EXPIRED, THE EUROPEAN COMMUNITY STEPPED UP ITS EXPORT SUBSIDY PROGRAMS, CONGRESS BEGAN WORKING ON PROTECTIONIST LEGISLATION AND FARM BUREAU PRESSURED FOR "BLENDED CREDIT" AND OTHER EXPORT FINANCING PROGRAMS.

AT THE SAME TIME THE WORLD HAS ENDURED THE MOST SEVERE RECESSION IN DECADES--UNEMPLOYMENT EVERYWHERE HAS BEEN HIGH--FARM PRICES HAVE BEEN LOW--AND GRAIN BINS ARE FULL WITH NEW BUMPER CROPS.

TRADE EXPANSION TRIPS THIS PAST YEAR INCLUDED A VISIT TO MEXICO AND TWO VISITS TO JAPAN. THERE WERE ALSO VISITS TO CAPITALS IN EUROPE WITH APPEARANCES BEFORE OFFICIALS OF THE EUROPEAN ECONOMIC COMMUNITY.

IN NOVEMBER BOB DELANO, PRESIDENT, AMERICAN FARM BUREAU FEDERATION, REPRESENTED PRIVATE SECTOR AGRICULTURE AS A MEMBER OF THE U.S. DELEGATION TO THE MINISTERAL MEETINGS OF GATT--THE GENERAL AGREEMENT ON TARIFFS AND TRADE, HELD IN GENEVA.

WITH REGARD TO FARM BUREAU'S PRIVATE TRIPS TO JAPAN AND EUROPE, I WAS PLEASED TO HAVE HAD THE OPPORTUNITY OF BEING A PART OF A GROUP OF STATE FARM BUREAU PRESIDENTS WHO PARTICIPATED IN THE TRADE EXPANSION TRIP TO JAPAN. WE USED THE OPEN AND FRIENDLY APPROACH, SHOWING

APPRECIATION TO THE EUROPEANS AS OUR NUMBER-ONE CUSTOMER AND TO THE JAPANESE AS OUR SINGLE MOST IMPORTANT MARKET FOR FARM PRODUCTS.

BUT WHEN IT CAME TO TALKING ABOUT TRADE PROBLEMS SUCH AS THE VIRTUAL LOCKOUT OF U.S. BEEF AND CITRUS TO JAPAN, OR THE EXPORT SUBSIDIES USED BY COUNTRIES OF THE ECONOMIC COMMUNITY TO CAPTURE WORLD MARKETS FROM US..THE PLEASANTRIES TURNED INTO PROTESTS IN EFFORTS TO RESOLVE SUCH TRADE PROBLEMS.

UNFORTUNATELY, THE JAPANESE GOVERNMENT HAS NOT BEEN AS FORTHCOMING AS IT SHOULD HAVE BEEN IN LIBERALIZING THEIR IMPORT QUOTAS. HOWEVER, THE RECENT VISIT OF PRIME MINISTER NAK-A-SONY SEEMS TO INDICATE SOME REASONS FOR HOPEFULNESS.

IT WAS REPORTED THAT MUCH THIS SAME ATTITUDE WAS EXPRESSED BY OFFICIALS IN EUROPEAN CAPITALS AND BY ECONOMIC COMMUNITY LEADERS IN BRUSSELS. --ALWAYS THERE WAS A POLITE RECEPTION--THE SAME RHETORIC--AND THE DENIALS THAT E.C. EXPORT SUBSIDIES HAVE INTERFERED WITH TRADITIONAL U.S. MARKETS.

THINGS CAME TO A HEAD AT A MEETING IN FRANKFURT, GERMANY, WHERE AN ECONOMIC COMMUNITY COMMISSIONER, POUL DOLSAGER, OPENED A JOINT U.S./E.C. MEETING BY FLATLY STATING THAT THE COMMUNITY HAD NO INTENTION OF BACKING AWAY FROM ITS "EXPORT REFUND SYSTEM"--WHICH IS WHAT THEY CALL THEIR PROGRAM OF EXPORT SUBSIDIES.

THE FARM BUREAU STATEMENT WHICH FOLLOWED CONDEMNED THE SUBSIDY PRACTICE--AND CLEARLY RAISED THE SPECTRE OF U.S. RETALIATION BACKED BY LARGE STOCKS OF FARM COMMODITIES AND THE SUBSIDIZING POWER OF THE U.S. TREASURY.

COMMISSIONER DOLSAGER CALLED THE FARM BUREAU STATEMENT "A VIRTUAL DECLARATION OF TRADE WAR..." THESE REMARKS, WHEN TAKEN UP BY THE PRESS--AND COUPLED WITH THE KNOWLEDGE OF ALMOST A HUNDRED TRADE PROTECTIONIST BILLS IN CONGRESS INCLUDING "LOCAL CONTENT" AND TRADE RECIPROCITY--AT LAST CAUGHT EUROPE'S ATTENTION.

THE E.C. COMMISSION PUBLICLY CHASTISED COMMISSIONER DOLSAGER FOR THE TONE OF HIS FRANKFURT REMARKS AND FOR NOT HAVING FIRST CLEARED HIS STATEMENT WITH THE COMMISSION.

SEVERAL INTERESTING THINGS HAVE HAPPENED SINCE THEN, BOTH IN JAPAN AND IN EUROPE.

SOME OF IT OCCURRED BECAUSE OF THE TREMENDOUS MEDIA COVERAGE THAT FOLLOWED WHEREVER OUR FARM BUREAU GROUPS WENT. ONE OF JAPAN'S LARGEST MAGAZINES WORKED WITH US TO PUBLISH FARM BUREAU AND AMERICAN FARMERS' VIEWS OF RESTRICTIVE JAPANESE TRADE PRACTICES.

INCREASED RECOGNITION OF THE IMPORTANCE OF U.S./JAPANESE TRADE RELATIONS WAS APPARENTLY REFLECTED IN A RECENT JAPANESE NEWSPAPER POLL WHICH FOUND THAT 52 PERCENT OF THOSE SURVEYED SUPPORTED LIBERALIZING OF U.S. BEEF IMPORTS, WHILE 50 PERCENT SUPPORTED LIBERALIZATION OF FRESH CITRUS AND CITRUS JUICE.

APPARENTLY THERE IS ALSO PUBLIC RECOGNITION THAT PRICE SUPPORT INCREASES MADE BY THE E.C. UNDER POLITICAL PRESSURE FROM EUROPEAN FARM GROUPS--HAVE ENCOURAGED PRODUCTION WELL OUT OF LINE WITH MARKET DEMAND.

IF THAT SEEMS FAMILIAR, MEMBERS OF THE ECONOMIC COMMUNITY--PARTICULARLY THE FRENCH--ARE QUICK TO POINT OUT THE SIMILARITY BETWEEN THE RESULTS OF THEIR FARM PROGRAMS AND THOSE OF THE UNITED STATES WHERE THE POLITICAL APPEAL OF HIGHER TARGET PRICES AND LOAN RATES HAS ALSO UNWISELY PROVIDED INCENTIVE TO PRODUCE WITHOUT REGARD FOR MARKETS.

WHEN PROBLEMS CREATED BY A NATION'S TROUBLESOME INTERNAL POLICY ARE EXPORTED--THEN IT BECOMES EVERYONE'S PROBLEM AND EVERYONE'S BUSINESS.

THE ECONOMIC COMMUNITY, THROUGH THE DEVICE OF "CAP" --THE COMMON AGRICULTURE POLICY--SPENDS TREMENDOUS SUMS OF MONEY TO GUARANTEE ARTIFICALLY HIGHER PRICES. THIS INCENTIVE ALSO GUARANTEES COMMODITY SURPLUSES PRODUCED AT COSTS HIGHER THAN WORLD MARKETS.

BECAUSE THE COMMUNITY IS UNCOMPETITIVE, IT MUST NEXT SPEND GREAT ADDITIONAL SUMS OF MONEY--NOW ESTIMATED AT MORE THAN $7 BILLION DOLLARS ANNUALLY, TO ARTIFICALLY LOWER PRICES TO ATTRACT WORLD CUSTOMERS.

IT HAS BEEN ARGUED THAT THE U.S. CAN NO LONGER AFFORD FREER TRADE.

I SAID "FREER" TRADE -- AS OPPOSED TO COMPLETELY FREE TRADE WHICH HAS NOT EXISTED BETWEEN NATIONS IN A VERY LONG TIME--IF EVER.

UNDER PRESENT CONDITIONS, WITH TRULY FREE TRADE OUR DEFICIT WITH JAPAN WOULD BE MUCH LARGER THAN IT IS NOW, FOR WE WOULD NOT INSIST ON SO-CALLED "VOLUNTARY" RESTRICTIONS ON CAR IMPORTS AND THE LIKE.

FREER TRADE ON THE PART OF THE UNITED STATES--UNMATCHED BY EQUALLY FREER TRADE BY OUR PARTNERS---WOULD SIMPLY MEAN AN ENLARGEMENT OF WHAT IS ALREADY HAPPENING BOTH IN JAPAN AND IN EUROPE.

BECAUSE OTHER COUNTRIES ARE NOT PLAYING FAIR IN THE INTERNATIONAL TRADE ARENA, FARM BUREAU NOW HAS RATIFIED POLICIES THAT WILL SUPPORT THE USE OF EXPORT SUBSIDIES TO RECAPTURE STOLEN MARKETS. HOPEFULLY SUCH ACTIONS, INSTEAD OF STARTING A TRADE WAR, WILL HELP STRENGTHEN ON-GOING NEGOTIATING EFFORTS.

FARM BUREAU EMPHASIZES FAIRER TRADE AND MUTUALLY ACCEPTABLE RULES THAT WOULD ASSURE IT.

THE LOOSENESS OF THE GATT SUBSIDY CODE AND THE LACK OF EFFECTIVE CODE DISCIPLINE WAS VERY EVIDENT AT THE NOVEMBER GATT MINISTERIAL MEETING IN GENEVA.

THE HISTORY OF THE PRESENT SUBSIDY CODE IS SOMEWHAT THE HISTORY OF CERTAIN FAILURES BY U.S. TRADE NEGOTIATORS IN THE EARLIER "TOKYO ROUND."

IN THAT ROUND, THE U.S. BARGAINED AWAY OUR "INJURY" CLAUSE THAT, UNTIL THEN, ALLOWED US FULL RIGHT TO USE COUNTERVAILING DUTIES AGAINST SUBSIDIZED IMPORTS WITHOUT NEED TO GO THROUGH THE LENGTHY AND UNSATISFACTORY PROCESS OF PROVING INJURY.

WHAT WE SUPPOSEDLY GAINED IN RETURN WAS THE RIGHT TO AN "EQUITABLE SHARE" OF WORLD MARKETS.

OUR EUROPEAN TRADING PARTNERS PROMPTLY MARCHED THROUGH THIS LOOPHOLE IN THE GATT AGREEMENT--AND NO ONE HAS SINCE DETERMINED WHAT REPRESENTS AN "EQUITABLE" MARKET SHARE OR HOW TO GAIN IT WITHOUT ENTERING THE SUBSIDY TRADE WAR UNILATERALLY UNDERWAY BY THE E.C.

OBVIOUSLY, THE PRESENT GATT SUBSIDY CODE DOES NOT REPRESENT THE CORRECT ROUTE TO FAIRER TRADE--AND SOMETHING MUST BE DONE ABOUT IT.

WE WERE HOPEFUL THAT THIS PROCESS WOULD BEGIN WITH THE GATT MINISTERIAL CONFERENCE, WHICH SOME DESCRIBED AS THE CONFERENCE NOBODY WANTED, CALLED TO CONSIDER RULES NOBODY WOULD FOLLOW.

THE 17 PAGE FINAL DOCUMENT THAT RESULTED WAS SAID TO BE "TOOTHLESS" AND THE STALLING TACTICS THAT PREVENTED ANY REAL PROGRESS ON THE SUBSIDY PROBLEM WERE DESCRIBED AS AN ECONOMIC COMMUNITY "SQUEEZE PLAY ON U.S. FARMERS."

THE TROUBLE WITH LABELS IS THAT THEY ARE SIMPLISTIC AND SELF-SERVING.
THERE WAS SOME PROGRESS AT THE MINISTERIAL SESSIONS. --NOT A GREAT DEAL--BUT SOME.

FOR PERHAPS THE FIRST TIME, EVERYONE WAS FORCED TO RECOGNIZE THE IMPORTANCE--AND THE PROBLEMS--OF AGRICULTURAL TRADE.

NO REAL ATTEMPTS WERE MADE TO DEAL WITH FARM PRODUCTS SEPARATELY OR ON A DIFFERENT BASIS THAN THE PRODUCTS OF ANY OTHER INDUSTRY--AND THAT WAS PROGRESS.

OUR U.S. MESSAGE...
--THAT TRADE BENEFITS EVERYONE...
--THAT ALL CONSUMERS BENEFIT FROM CHOICE...
--THAT THE ONLY WAY TO STRONG AND LASTING TRADE IS THROUGH ASSURING MUTUAL ADVANTAGE, A FAIR SHAKE FOR EVERYONE...

THESE MESSAGES FROM THE UNITED STATES WERE HEARD--AND UNDERSTOOD. AND THAT IS PROGRESS TOO.

FLAWED AS IT IS--GATT--THE GENERAL AGREEMENT ON TARIFFS AND TRADE--IS THE BEST TRADE SAFETY DEVICE THAT EXISTS.

WE JUST HAVE TO MAKE IT WORK BETTER.

THANK YOU MR. CHAIRMAN FOR THIS OPPORTUNITY TO ADDRESS THIS COMMITTEE

Chairman DOMENICI. Senator, I am just going to quickly ask a few questions and then yield to you. I am not going to use any time clock; there are just the two of us.

It is my understanding that we would like to finish in about 15 to 20 minutes to accommodate everyone.

Governor, let me first suggest that I appreciate very much your testimony with reference to the Nation's economy and the national problems that are described by you in terms of excessive deficits. Only a minor portion of your testimony is directed at specifics that affect your agricultural community and your State.

I think you are right. I do not think any of the programs we are talking about, whether this one is increased by $10 million or lowered by $30 million, come anywhere close to the significance of the well-being of the overall American economy and that it must grow. The testimony that you have given us about reducing the deficits and the testimony of Robert Anderson with reference to the dollar puts it into focus. The kind of problems are really not found within the small budgets of different programs.

GOVERNORS TO MAKE NEW PROPOSAL

I understand, and I only tell you this because I understand the Governors of the United States are going to be meeting next week. It has been my privilege to discuss budget issues at some length with Governor Mathison. He, along with Governor Thompson and a couple of other Governors, are going to propose something very dramatic for American Governors and propose that the Governors take a position they have never taken before. The proposal is to basically ignore looking at programs in depth as they relate to their States and that they instead will address the national economy from the standpoint of what deficits, military expenditures, level of taxation is reasonable, and how much deficit can we afford.

I only tell you that because I would assume that is going to be a very difficult exercise for the Governors. That means they will assume a national leadership role rather than the typical position of coming up and telling Congress, here is our list of programs that we have to cope with in our State budgets, and we'd like you to do this, that, or the other with them.

That is not to say that they will not address appropriated accounts and, when they talk of a freeze, talk about some caution. They will talk about jobs programs and give their views. But I would hope that, having heard what you have heard here today and what you obviously know from your statement, that you will at least be encouraged up front to give serious consideration to a national Governors' position that addresses the macro problems of our country and the deficits and the like and is not so focused as in past years on programs.

I really do not expect you to answer yet because you have to see the statement. It is tough. And there are not going to be very many programs that go up. At best, they are going to be frozen for a while. Many will come down. And you will be asked to take a position on such things as medicare, pension programs of the country, and the like, so-called entitlements. That would be rather refreshing, if Senator Exon and I and many others have the Governors share in that with us for once. I will be speaking to you. So, you will get to hear me down there when you meet. I am going to encourage it even more strongly.

Senator EXON. As a former Governor, I would just say it is probably the last time they will have a Governors' conference.

Chairman DOMENICI. You got it. You are close. It may never get off the block, that proposal.

Anyhow, there are some very good Governors suggesting it. I could not miss this opportunity to share that with you.

RESTRAINING OUTLAYS BY CONGRESS NOT LIKELY

I would also tell you one thing. When you speak of further restraining the budget, I am not here to suggest that the President's budget is a perfect budget, but I just want to give you a couple of numbers.

If you take current services, that is, assume we leave everything like it is, including the tax laws that are in place, and we assume reasonable recovery, 3.5 percent to start with and maybe 4 for 4 years or so, the problem we have got is monumental. So, when you speak indirectly of encouraging us to even cut more, we want to get the deficits down faster, I just give you a bulk number.

That blueprint in its big picture reduces the size of deficits over 5 years by $580 billion over what it will be if we leave everything alone. Now, that is a bunch. It is about 60-40, 61-39, expenditure reductions, versus tax increases. That is really what it is going to boil down to, how much do we want in new taxes over the next 5 years coupled with outlay reductions to get on some trend line that brings us down.

It is easy to look at it from out there but very difficult from up here. Frankly, I do not believe Congress will find a way to restrain outlays and impose taxes sufficient to get a reasonably recovering economy down to $150 billion deficit by 1988 on any reasonable economic assumptions. I know what they have to reduce, and I know how much taxes they have to increase; and I cannot see it happening.

I hope we make a stride in that direction. I would certainly be pleased with any significant stride.

REAL PROBLEMS REMAIN

I just wanted to tell you that it is no little job, and it is not led by small programs that are appropriated every year. I mean, we are left with the real problems, medicare, pension programs of all types, index programs that are automatic, military, and taxes. We could take all the rest, and if you want $30 million more and whatever you ask for and $42 million more in the other, it does not make any difference. Those are going to happen or not happen. But, in terms of this big picture, they are really rather irrelevant.

If somebody wants to save money, you would leave food stamps as it is, and you can save $300 or $400 million. Those are not the problems. The problems are the five that I have described that are growing inordinately fast, and nobody really wants to bite the bullet. You see how long it took on social security. And we are not sure we bit a bullet when we are finished. It may be something less than a bullet that was bit, and it may not come out fixed.

In any event, since you are fiscally responsible in urging that we reduce those deficits rapidly, I thought I would give you my 3-minute observation on what they are made up of and assure you that you will have a chance to join with Governor Mathison and others, and recommend those kinds of changes.

CONTROL OF FAST GROWING PROGRAMS MUST BE SHARED

Governor **Kerrey**. Mr. Chairman, from my part, I sit as Governor and also look out to counties and cities, as the State government looks to the Federal Government. We are all positioned and must share in the responsibility for coming up with answers to control some of the programs that are growing much faster than we can tolerate.

We have programs in Nebraska, and we are prepared to deal with the problem of growing expenditures for medicaid and medicare. We are trying to come up with some answers to control and make the food stamp program work more effectively and efficiently and, in fact, help people rather than hurt them.

It gives me some grief and some pain to hear that a $150 billion deficit may be the best that we can do. But I do recognize the difficulty in accomplishing it.

I, further, appreciate very much that it is going to take the Governors and other individuals being willing to step up to the plate and say that it must come from this defense program, it is nonneeded entitlements that are growing, and we are going to have to deal with and be willing to identify those programs and be willing to suffer the consequences as well, knowing, as Mr. Anderson so correctly stated, that we could 5 years from now be looking back at the liquidation of not just our industrial base but our agricultural production base as well and saying, well, we suffered that loss instead of suffering the loss of face or perhaps even the loss of office that may come from stepping up and identifying those programs that must be capped.

I expect we will find the Governors, when we meet next week, are going to be willing at least I would suggest in the majority, because we are seeing now at the local level what happens when that is not done.

We know that we cannot continue the way we are going right now. We can see the future out long enough that we do not like what we see. The optimism that is being expressed by many people is not likely to be expressed by many of the Governors, who are seeing rising unemployment continuing, seeing a decline of revenues, seeing people demanding greater and greater shares of social services, and know that it cannot continue.

They know as well, on the bright side, that we have farmers like Rob Raun, and we have people who are ready, willing and able to work very hard to make this Nation competitive. I do not worry about the individual people of this Nation being able to competitively deal with any other peoples on this planet. I just worry about whether political leaders such as myself are going to have the courage when it comes time to hit the ball to swing at the right one.

4-PERCENT GROWTH RATE IS OPTIMISTIC

Chairman **Domenici**. Mr. Anderson, you have seen the economic projections of the CBO and the President in terms of growth. For the next 5 years, both of those institutions, the President, with his entourage being one, and CBO being the other have us growing roughly on average about 4 percent for the next 5 years.

My first question is, can you envision a scenario by which we could grow faster than that, if not for the whole period, for some of it? If so, what are the principal ingredients that would make us grow faster than that?

Mr. **Anderson**. I think the first would be a determination that we are going to be competitive. Dr. Johnson here said he thought a 15-percent reduction in the price of the dollar would be beneficial, and I agree; it would be beneficial. The 30 or 40 probably cannot be attained, but say 25 percent reduction in the value of the dollar. It would reverse this erosion of our markets. And it is continuing right now. People do not move into a new market overnight. It takes some time to find warehousing facilities, ways to distribute, and what not.

The real invasion of the foreign products into this country is really at its peak right now as one producer follows another in.

I would say, if we made up our minds that we want a growing productive society—and there has been a lot of discussion in the last 10 years about the desirability of growth—in my mind there is no question that to survive we have to have it to provide the jobs and job opportunities that our society requires. I think, simply, we must take a more positive and aggressive posture in world trade. Make it clear that we are not going to give up markets willy nilly. We are not going to be pushed out of this corner or that corner. We are going to be as competitive as anyone else.

We have a long way to go back. We have lost so much industry now and so many jobs that just recapturing them is going to be slow.

I think the 4 percent is somewhat optimistic.

Chairman **Domenici**. You do not think we should be planning for much more in our projections in the outyears?

Mr. **Anderson**. I think you would be kidding yourselves, in my opinion.

Chairman **Domenici**. I know of no one on the committee that proposes a higher one, but some in the country are saying we ought to plan for higher projections, and therefore the deficits would be much smaller. I tend to think that we ought to plan for the big deficits and do what we can to get them down. If we are lucky enough to get a 5-percent growth rate one of those years, we would just have a boost.

IMPROVE ECONOMIC LEVEL OF WORLD

Mr. **Anderson**. If we could improve the economic level of the rest of the world, particularly Third World countries, through bringing the cost of servicing dollar debt down, I think you could exceed that 4 percent.

This country cannot have a growing economic base with the rest of the world in recession. It is not realistic. And the rest of the world certainly cannot have growth of any sort without this country leading the way. So, we need a very strong recovery if we are going to pull the rest of the world out of the mud, too. We are the only tractor, so to speak, that can generate the horsepower to get the show back on the road.

As I said earlier, if we are unwilling to take any risk at all about renewed inflation, then I think growth forecasts are overstated because with our production level at two-thirds of capacity, I think it would take quite a bit of stimulus to restore real inflation in the system. I think it is a risk we have to take if we want to beat that performance.

Getting the economy back to work would do a great deal to narrow your budget gap, no question about it. National revenues are declining and probably will decline this year.

Chairman DOMENICI. I have two other quick questions.

ECONOMIC STIMULUS FACTOR OVERLOOKED

Yesterday, Secretary Shultz said that we ought to consider the dramatic drop in oil prices, evidenced in the last few days, and even a further drop in them as being something very significant. And, while it has risks, he says it is a very positive thing and should be viewed as a positive factor in terms of our chances for economic recovery.

I had read both sides of that issue. I would like you to express yourself on that.

Mr. ANDERSON. I think the economic stimulus factor has been a little bit overlooked. If the gulf producers drop the price to $28 a barrel, I think the reduction in cost to the U.S. economy could be in the $40 to $50 billion range, which is the equivalent of a $40 or $50 billion injection because what you save on one account you obviously have to spend on some other account. Now, that is a horseback figure. A penny reduction in gasoline price is about $1 billion. I think we have already seen a fair amount of price reduction at the pump. As a matter of fact, pump price may be running somewhat ahead of the crude price at the moment.

If we see pump prices stabilize out, it may be down another 8 to 10 cents, and then you add the heavy-fuel components, the home heating oil component, the other aspects of it, it could be as much as a $40 billion injection into the economy. If it were coming from any other source, no question, it would be sizable and of a very constructive nature. It simply moves it from one category to the other. It takes a lot of it out of the hands of foreign producers, where it really does not do our economy much good, and puts it into the consumer's pocket, hopefully to spend.

Chairman DOMENICI. Then why do you support an import fee?

Mr. ANDERSON. For government revenue.

Chairman DOMENICI. Because of the various sources of revenue, it is one of the best?

Mr. **Anderson**. Yes. The Government loses a considerable amount of revenue when you put $40 or $50 billion back into the economy. An import fee may be necessary to offset some of the reductions in other revenues.

The windfall profits tax goes down rather abruptly, and that is government revenue. About 80 percent of the net benefit from oil and gas production of this country goes to government agencies, State, Federal, or whatever. So, when the price of oil goes down, the big loser is the public sector. I think revenues will go down. That is the reason—it is the wrong time for your budget to have your revenues slip off, but they may very readily go off.

Chairman **Domenici**. I have one question of Pete Davis, and then I will yield to my good friend from Nebraska.

LEAVING TAXES UNCHANGED WOULD HAVE SERIOUS IMPACT

In terms of the PIK program, you were out there talking with the farmer in the field. How serious will the impact be if the Internal Revenue Commissioner's decision on taxes is left unchanged?

Mr. **Davis**. I think it would be quite serious. This is a crop swap. The tax would not be due until the time of the next tax return, which sometimes would be 6 months. It would affect the number of farmers that might not sign up if this really had to be paid at the moment that they took ownership. We are hoping, at least, they will not even sell. A lot of them will not. It is going to market orderly. And it would not be if that was the case because they would have to sell to raise at least a part of it to raise the revenue.

Chairman **Domenici**. So, you support the efforts to get that changed as soon as possible?

Mr. **Davis**. I certainly do.

Chairman **Domenici**. Senator Exon.

Senator **Exon**. Thank you, Mr. Chairman. Just for the record, I would note that the chairman indicated that he wanted to wind up in 15 minutes, and he took 17 minutes. That is a prerogative. I am going to be very brief and very short. I say that, the chairman knows that I have the highest respect for him. Of all the chairmen under which I serve, there is no one who is fairer or more reasonable, more considerate than the chairman of this committee. If he were a member of the right party, he would be perfect.

Chairman **Domenici**. Mr. Anderson talked too long; I didn't. [Laughter.]

Senator **Exon**. The chairman made an excellent point. I hope that you people in the private sector—and you are here, for the most part, representing the private sector—would help us get across a message that is not there today. I still can tell from my mail, from the people I talk to in Nebraska and elsewhere, that they have a feeling: If we just wanted to, you know, if we just had the will, we could balance this budget up here very easily.

We do not hear the words waste, fraud and abuse much anymore. Those are old-fashioned words. It used to be we were going to balance the budget by just eliminating waste, fraud and abuse. They just do not seem to understand that of every dollar in the budget, 36 cents of it is social security, medicare, and medicaid, and pension programs. There are not very many of the people who want to touch those. And 27 cents of it is military. While there is some indication that we might cut that some, not too much. And another 12 cents is interest.

That leaves 25 cents for all of the other programs of the Federal Government, including agriculture as we are talking about here today.

I think, before we can tackle the problem, we have got to convince a majority of the people of the United States that we have got a major problem on our hands. It is not that we lack the will on this committee or in the Congress or in the administration to do something about it.

Having said that, I just want to go to a question. I have a lot of questions. This has been a tremendously interesting afternoon. Mr. Chairman, I forego my other questions, save for one that I would like to ask of the two dirt farmers that we have here, Mr. Davis sitting over here, and Mr. Rob Raun, Director of the Department of Agriculture, sitting over there.

FUTURE FARM PROGRAMS

I would like to ask about future farm programs because it is clear that we are going to have some future farm programs. The testimony Mr. Davis gave indicated that there are some well-managed farms. That is true. Management of farms, like management of a business, is more critical today than anyplace else because, if they are not well managed, they are not going to be there very long.

On the other hand, having said that, I feel that the best-managed farm that we have today is the farm that someone purchased about 1945 and has been there for 40 years. And there are one or two people sitting in this room today that I know very well have well-managed farms that fit into that category. But, if that farmer wants to sell that farm to someone else or turn it over to his son, there is no way under the present system that, even if that subsequent owner is a better manager than the present one, the farm will likely show a profit.

Having said that, what do we do in the future? One of the things that we have always used—and one of the witnesses said something about it here today—was the acreage production control. How much talk is there among farmers today, and there are two of you here today who must have some knowledge of this, regarding any chance to work our way out of this in future years, looking at the need for soil conservation and all the good practices that the well-managed farms are interested in, by going to some kind of an acreage or a bales-per-farm rather than acreage production?

You are both good farmers. I will bet you both know best how to take advantage of a Federal program that is based on acreage. You know which is your worst acre on that farm. If you have to reduce acreage by 1 percent, you take that acreage out. Is there any feeling today that maybe in some of our other farm programs we should do what has been done quite successfully in the tobacco industry, and that is to go to bales or poundage or bushels as part of a farm program rather than acreage? Does that make any sense? Has it been talked about? How do you think it would be received?

We will start with you, Mr. Davis.

ACCEPT CHALLENGE OF COMPETITION WORLDWIDE

Mr. DAVIS. I do not think there is any doubt in anybody's mind. It has been talked about time and time again. I particularly do not like it. You know, when we are sitting astraddle that tractor and chasing that calf, we think a lot; and you are right. We work on those Federal programs. Any program of acreage reduction we have had in years past, I think I am right in say, they have not been particularly effective as far as cutting the surplus. They have cut the buildup of surplus.

The reason that I favor the PIK program more than any other one that we have had in more than recent years, in years past, is that we are going to 50 percent this time. I think it can really cut some production.

Ideally, I would hope, as somebody mentioned here today, that the American farmer will accept challenge or competition worldwide if it is a fair competitive basis. But as far as accepting it and selling it, we can sell our product. If we feel like we can compete worldwide and sell it, that is what we would like to do and help balance the trade.

But to say no, absolutely no to what you are saying, I am not saying that today. Hopefully, this step we are taking with the PIK program is a good step in the right direction of where we will avoid that.

Senator EXON. Thank you.

Mr. RAUN. Senators, I would have to agree with the gentleman from New Mexico. I think that, if we go back a long time to about the time that I started farming, if my memory serves me correctly, there was a marketing quota on wheat that pretty much did that. But that was abandoned a long time ago. The effect that bushel or bale production controls would have on the total thing is one that I have not given a lot of thought to, and I have not heard it discussed a lot. I doubt that it would be very workable. It may be, though. I may be wrong in saying that. I think that is one approach where we could really get a handle on it. But it does involve some pretty rigid kinds of controls.

FORMULATE LONG-TERM PROGRAM WITH TRIGGERING MECHANISM

I would like to say, however, that with the mention made this afternoon that the PIK program, we hope it is going to do a lot of good this first year, we think it may need to be kept in force another year to really get a handle on surplus production, that it would certainly help the farmers a lot if we could plan ahead to next year and have some idea as to what next year's program might include so that we can do a good job of planning our business and cooperate with the Government to get these surpluses down and get the economy headed in an upward direction and, if it were possible, to formulate a farm program that was a long-term program that had a triggering mechanism which put the farm program in force when certain surplus levels are reached. We have gotten into this situation right now, you know, where it built up because of some good growing conditions and poor market conditions all over the world. If we could have one that came in effect pretty much automatically, then farmers would have some better idea of what to plan for. We would not have to be making these emergency steps and doing it all of a sudden with a good deal of confusion on the farm as to what a man ought to do. He may wake up the day after the sign-up deadline ends and decide that he has made the wrong decision, but by that time it is too late. Thank you.

Senator EXON. Mr. Chairman, I just want to thank the panel. I think it has been a tremendously informative afternoon. I wish we had more time, but we have run out of time. Thank you all very much.

Chairman DOMENICI. Let me ask, if you will stay for just one more moment, I will yield to another question of you. Dr. Polopolus, we did not ask you anything in the second round. In your expert capacity, is there anything you would like to add to what has been said? Do you have any observations?

DEVELOPMENT OF EXPORT MARKET

Dr. POLOPOLUS. The only comment I would make is about the difficulty of export market development. There are a number of tools that are available. A number of industries have had a lot of experience in developing the market, assuming that we can deal with the dollar problem. In my written text, I stated that problem, but not as eloquently as Robert O. Anderson, but I did state it. It is important.

There are a number of alternative vehicles that we have. The three-party program that we have had in effect, which deals with promotion, has been a good one that we developed between an industry group in the United States, the U.S. Government agency, and recipient country. That program seems to work.

The American Soybean Association did a study recently to try to determine what is the most effective way of promoting exports of soybeans abroad and where did they get the most result back to the American soybean farmer. They found the result was that, if we export more value-added product as opposed to the raw bean, we can generate a higher price back to the grower, other things being equal.

I think there is a thinking around the country that we should try to move in the direction of more value-added exports where that opportunity presents itself. I think we have the knowhow and the capability. It certainly helps the infrastructure of our own society here with more jobs and so forth.

So, there are a number of techniques and tools that we have available. The blended credit program that the Secretary has announced seems to be a sensible one. It gets a little into the area of subsidized exports, but maybe we need some of that to match off the subsidies coming the other way.

It is a tough area. I think the American people can find a solution, maybe even a Madison Avenue approach. I think we are number one in the communication business in the world and in promoting a product. Farmers in general tend not to think about the marketing of their production. They worry about how to produce it but not how to market it. I think it is the job of society in general to pay some attention to the best techniques and opportunities to make that product and production and abundance available worldwide. I think it will benefit the American society.

There are a number of other options that we have available, but those are a few.

BUDGET PROBLEMS NOT UNDERSTOOD BY PUBLIC

Chairman **DOMENICI**. I want to close by saying to my good friend from Nebraska that you have just indicated we have a long way to go in terms of the public understanding of budget problems. One of our good friends in the Senate said the other morning at a meeting of a National Committee for the Retention of Reasonable Budget Practices by the United States, after hearing all of us analyze and do our big thing, that he had a huge meeting in his State, well staffed and all the maps and graphs showing what you have just described, Senator, and entitlements this, and the tax base that. So then he opened it up for questions. And the first question was from a 78-year-old lady in the front row. She put her hand up. Her question was: Senator, when are you going to reinstate the benefit for World War 1 veterans' widows?

He suggested that he had not made much of an impact that day.

I would suggest that we also today saw the governor criticize the administration for cutting a program in agriculture. This morning we saw a Senator criticize the secretary for adding money to an agricultural program. One was critical because we were not spending enough money on land conservation. This morning they were critical because some money was in that might add agricultural land ultimately to the inventory.

And that reminds me of my closing remark. I do not know how many letters you have received, Senator, of this type, but I get them frequently, especially from good friends that helped in campaigns: Dear Pete, you're doing a fine job. Don't you remember? I helped you in your campaign. I'm so and so's relative. Now, please don't cut my program. I need it very much and you know I need it. Your friend. P.S.: Balance that budget.

Thank you all very much.

[Whereupon, at 4:20 p.m., the meeting was adjourned.]

Office of Agricultural
Economic Research
The University of Chicago
Paper No. 83:04
January 31, 1983

AGRICULTURE AND U.S. TRADE POLICY

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A little more than three decades ago I wrote a book with the title Agriculture and Trade: A Study of Inconsistent Policies. Except for a number of details and changes in dates, a book on the same topic would be as timely today as when it was written at the time the General Agreement on Trade and Tariffs (GATT) was negotiated and a new framework for trade liberalization was created. And the general structure of such a book today would differ little from the 1950 version and, unfortunately, the same general conclusions would be put forward.

The basic source of the inconsistency between agricultural and trade policies, now and then, is that particular agricultural price and income programs require control over international trade as an adjunct to carrying out the domestic programs. When governments intervene in agricultural product markets through price supports or commodity loans, minimizing the costs imposed upon the public treasury requires that imports be restricted and, if domestic output is larger than can be sold in the market at the artificially established price, then export subsidies are required or stocks will be accumulated until they become so burdensome that they must be disposed of by one or more means.

To be presented at the conference, Agriculture in the Twenty-First Century, Richmond, Virginia, April 11-13, 1983.

The preparation of this paper was assisted in part by a grant to The University of Chicago by the Ford Foundation. None of the views expressed should be attributed to any one but the author.

In 1950 I wrote as follows: "The group of programs that constitute what may be called agricultural price programs has required the insulation of domestic markets from the impact of alternative sources of supply. These programs have driven a wedge between domestic and foreign prices of the same product. They have operated on the premise that the way to improve the income of the American farmer is to raise prices. No one nation by itself, with only minor exceptions, can afford to take the actions required to raise the level of prices for a product in world markets. To do so, as the United States tried with cotton in the middle thirties, leads to increased production in other nations and the loss of a large share of the export market" (p. 28).

What was written about the interrelations between certain types of domestic farm programs, namely those that attempt to achieve their objectives by intervening in market prices, applies with equal force today and not only to the United States but to nearly every nation in the world. The majority of the interventions in international trade in agricultural products, whether involving limitations on imports or exports or subsidization or taxing of exports, are undertaken as a consequence of domestic agricultural and food policies. This is the most important reason why it has been so difficult to successfully negotiate reductions in agricultural trade barriers. To negotiate about agricultural trade is very often to negotiate about domestic agricultural programs and policies, such as the level of dairy price supports in the United States and Canada, the target prices established by the European Economic Community, or the high domestic prices for beef, rice and wheat in Japan or the low price of bread in Egypt. So far no country has been either willing or able to engage in meaningful negotiations about the domestic agricultural programs and policies that require particular trade barriers and interventions.

My emphasis today will be upon the United States and the continuing conflicts between agricultural and international trade policies. Put simply the U.S. professes its support of a liberal trade policy and has had the major leadership role in the world in pressing for more liberal trade for nearly a half century. And while the conflicts betweeen domestic farm programs and a liberal trade policy are now less numerous and striking than in 1950, many of the conflicts have persisted without abatement and others have emerged in a more subtle form. This paper will not be about the protectionist measures of our major trading partners. It is time, in my opinion, that we take a serious look at ourselves--to take a good look in the mirror--and reflect upon what we would have to do if we really practiced what we preached.

Trade and Agricultural Policies

Officials of the U.S. Government have long complained about the trade restrictions and interventions affecting agricultural trade imposed by most of our major trading partners. Currently we are pressing Japan and the European Community for significant modifications of their agricultural and trade policies. The modifications would reduce the level of protection of agriculture and thus expand the opportunities for exports of U.S. farm products. The reduction in the level of protection may affect either the amounts imported or the quantities exported by particular countries.

Over the past quarter century there has been substantial progress toward the liberalization of trade in manufactured products, and this is true even with the recent protectionist moves of many industrial countries. However, none of the major rounds of GATT negotiations has resulted in a significant reduction in the barriers to imports or uneconomic maintenance of agricultural exports. One important reason for the greater intractability of agricultural trade barriers is that such barriers and interventions result from the features of domestic atricultural policies and programs. In other words, trade interventions result from the consequences of decisions that determine national prices, production and consumption. Consequently, nations when pressed to reduce their agricultural trade interventions often respond by retorting that this is an illegitimate interference with their domestic policies. Trade interventions generally cannot be reduced except by changing some component of an agricultural program, such as the level of price support.

The complaints made by the U.S. have had minimal effects in reducing trade restrictions that impede the flow of trade in agricultural products or the value or quantity of our farm exports. Why is this so? Perhaps the most important reason has been noted, namely that trade interventions are generally extensions of domestic agricultural policies. But there is at least one other important reason, namely that the United States continues to utilize means of trade intervention that are of the same type as those we argue should be reduced or abandoned. Claude Villain, an often shrill spokesman for the Common Agricultural Policy of the European Community, can say with much truth and only some exaggeration:

> ". . . let me say how amazed and even envious I am when I review the panoply of instruments which a liberal country such as the U.S. possesses to support its exports!
>
> "To mention only some, there are measures of trade promotion, export credit, export guarantees and insurance, food aid under P.L. 480, the DISC tax arrangements, government-to-government agreements particularly for milk products, the drawback system for sugar, and so on.
>
> "I will simply say that if you compare the budget spending on

> agriculture with the value added of the agricultural industry, you will find that in 1976 to 1978 the ratio in the EEC was 39.2% and in the USA it was 37.6%. That is nothing like the gap which some critics would have you believe.
>
> "Initially, the 1982/83 US Farm Budget envisaged large reductions. However, substantial revisions have since been made which increase foreseeable outlays by some 6.8 billion $. When I look at the Farm Bill, I see that the target price system is continued, that the milk support program, despite some changes is still likely to lead to a big surplus, and that a new sugar support program is being introduced. I always thought that the U.S. was the great defender of free competition, but I must say that all these target prices and support program have a familiar European ring to them . . . .
>
> ". . . I must say that I think the free-trading United States is armed with a remarkable weapon in the form of the GATT waiver. This is the exemption which since 1955 has allowed you to ignore certain rules of the GATT; and I note that the US authorities have invented an impressive number of other measures, including import quotas, supplementary taxes, domestic price rules, and marketing orders."

As 1982 came to a close the United States was threatening to engage in an export subsidy war with the EC in an effort to counteract presumed losses of exports of grains and chickens resulting from the high levels of export restitutions paid by the EC. On this point, I am in complete agreement with Villain who responded to a statement by Secretary Block to the effect that the U.S. was ". . . going to do battle with the EEC wherever and whenever it is necessary" by saying: "Make no mistake about it: if there is economic warfare between the United States and Europe, there will be no winner. Both of us will be losers." What Villain did not add is that there would be other losers, namely the competing exporters such as Brazil and Thailand, that do not have the enormous financial resources available to officials of the world's great economies. I must admit that I can think of nothing that would be more effective in strengthening the position of the supporters of the Common Agricultural Policy than an export subsidy war. Such a war would only confirm the view that the United States intervenes in agricultural trade to the same degree as does the European Community.

What If There Were Free Trade

On occasion I have a dream. In that dream I see consternation on Capital Hill, on Independence and Pennsylvania Avenues in Washington where the European Community and the Japanese offer to eliminate all economic barriers to trade in agricultural products except for a modest ad valorem tariff. The consternation is great, indeed. The U.S. Government has made no plans to respond to an offer of a significant liberalization of trade in agricultural products. There is no difference on this point, either in my dream or in the real world, between democrats and republicans. In fact, there has been a nearly universal unwillingness to even consider what the consequences of such liberalization might be.

When I awake from my dream, I remember that there does exist a report done in the early 1970s at the request of the Council on International Economic Policy as a part of the preparation of a proposed round of multilateral trade negotiations. The report which had been prepared as an internal document to assist in the determination of a negotiating position was leaked by the late Hubert H. Humphrey, presumably in an effort to embarrass the Nixon administration. In the report, generally identified as the Flanigan Report, the unimaginable had been asked--what would be the trade and some of the economic effects of a significant liberalization of agricultural trade by the United States and the other industrial countries. At the request of Peter Flanigan, a more detailed study was prepared to estimate the effects of trade liberalization upon employment in agriculture and net farm income in the European Community and Japan. The work was nearly completed in 1973 but the report was never published since it was decided in the office of the Secretary of Agriculture that there would be adverse foreign reactions to the results.

So far as I know there has been no subsequent work along the same line undertaken by the U.S. Government. Nor has there been any systematic effort to indicate how U.S. farm programs could be made consistent, over a defined period of time, with a liberal trade policy. Trade is now so important to U.S. agriculture that it would seem appropriate for some responsible component of government to consider how the U.S. could accept substantial and universal liberalization of agricultural trade. This may seem too utopian to consider, but there is much in-between ground that could be covered that would improve our position as a supporter of liberal trade in agricultural products. As things now stand, it is rather easy to characterize the U.S. position as one of favoring trade liberalization for products that we export but also one that is highly restrictive for imported products that are competitive with our own production. This is something of a caricature--but not very much. I shall devote the rest of my remarks to this issue.

GATT Provisions for Agriculture

The General Agreement on Trade and Tariffs (GATT) permits special forms of protection for agriculture. These provisions were included at the insistence of the United States. One of these is Article XVI which deals with the issue of subsidies, both domestic and international, for agriculture. Under Article XVI countries are not supposed to use subsidies "including any form of income or price support, which operates directly or indirectly to increase exports--or to reduce imports of any product." No form of direct or indirect subsidy is to be used to acquire "more than an equitable share of world exports, account being taken of the shares . . . during a previous representative period, and any special factors . . . ." The loose nature of the provisions with respect to the use of export subsidies plagues GATT to this day; apparently the Tokyo Round accomplished nothing with respect to subsidies and countervailing duties and the discussions to implement the code envisaged by the agreements reached have gotten nowhere in three years.

Article XI bravely provides that "no prohibitions or restrictions other than duties, taxes or other charges" shall be "instituted or maintained on imports or exports." Specific reference was made to the banning of quotas and licenses and similar measures. But, alas, the second paragraph of the same Article included a clause, at the insistence of the United States, that quantitative import restrictions could be used where necessary to the enforcement of governmental measures which (a) restrict domestic output or marketings or, (b) remove a temporary surplus from the market by making it available to certain groups of domestic consumers at less than current market prices, or (c) restrict the output of an animal product directly dependent on the imported product.

U.S. Farm Programs and GATT

The U.S. has a number of farm programs that clearly violate the letter or spirit of GATT. Some of the provisions have no significant economic effect but yet are retained in spite of their violation of GATT Article XI. Other provisions that violate GATT provisions do have significant economic effects. Frankly, it is relatively easy to see why foreign officials react with skepticism when we loudly proclaim our support for liberal trade in agricultural products while we have a GATT waiver so that we can maintain import quotas on dairy products since our dairy price support programs are not designed to "restrict domestic output or marketings" of milk. Quite the contrary; the programs are in fact designed in such a way that milk production is encouraged.

While it is true that the U.S. has fewer quantitative restrictions on imports of agricultural products than any other industrial country, save perhaps Australia, it is not particularly helpful to be reminded that (Mangum and Rossmiller):

> "And some would argue that the Section 22 legislation and the waiver that grandfathers it into GATT is proof positive that agriculture is basically protectionistic. But Section 22 provides for border protection mainly in the form of quotas not to protect agriculture per se, but rather to protect the ability of the government to carry out effectively the mandated agricultural price support programs without undue cost to the Treasury. In recent years Section 22 has been invoked for dairy, sugar, peanuts, and cotton but not for the main traded commodities wheat, feedgrains, rice or soybeans" (p. 5).

These sentences are from what is an otherwise excellent paper on U.S. agricultural trade policies, and the efforts to ward off protectionist moves, by the Director and Deputy Director of the U.S. Foreign Agricultural Service. What I find objectionable, but probably realistic, about the quoted words is that the import quotas imposed under Section 22 are used to hold down Treasury costs and not to protect agriculture. Either this means that we have import quotas that violate GATT principles, and this was true for at least three of the four cases cited, for the convenience of the bureaucrats, or to reduce Treasury costs, and thus make the farm price support programs more acceptable to the American voters. The latter reason can just as readily be given to justify the variable levies and export subsidies used by the European Community and the numerous import restraints imposed by the Japanese to maintain their somewhat peculiar internal price structure for agriculture.

The most blatant of our violations of GATT principles is our dairy price support program. We use import quotas; we use export subsidies to dispose of part of the mountains of butter and dry skim milk that we acquire in our efforts to maintain dairy product prices at levels significantly above those of the world's low cost producers. We often cloak our subsidized exports by calling them food aid, but in doing so we fool no one except possibly ourselves. In nearly three decades we have done nothing to bring our dairy programs into conformity with our GATT obligations; we have apparently considered it preferable to continue to take advantage of the GATT waiver. This has been done in spite of the substantial impairment of our negotiating position for liberalizing agricultural trade that results from the existence of the waiver.

The weakness of our commitment to GATT principles and liberal trade in agricultural products can be discerned by considering some of the consequences of our dairy price support programs. From 1960 until 1975 our dairy price supports did not encourage increased milk production; in fact, over that period milk production declined by 6 percent, admittedly not very much but nevertheless it declined. But in response to sharp increases in milk price supports in early 1977, milk production increased by 15 percent through 1981 and continued to increase further in 1982. In 1981 the U.S. government had to purchase a tenth of total milk production to meet its price support commitments. While a significant fraction of the milk acquired by the government was disposed of domestically, in 1981 we exported the equivalent of 1.4 million metric tons of milk while importing just 1.0

million tons. This is not the pattern of trade that would have resulted from a liberal trade regime. With liberal trade we would be a significant net importer of dairy products.

In recent years our farm prices for dairy products have been equal to or higher than those received by farmers in the EC. In 1980 U.S. farmers received $28.60 for 100 kilograms of milk sold to all plants; the average price received by farmers in the Netherlands was $28.70 and in France $26.85. In 1981, when the value of the dollar was much higher than in 1980, milk prices received by U.S. farmers were a quarter higher than prices received by Common Market farmers when local currencies were converted to dollars. And the U.S. dairy farmer had access to significantly cheaper feed than did his Common Market counterpart.

And it is not possible to argue that the recent return to a sugar program dependent upon high price supports and import quotas is consistent with GATT principles for exceptions to the use of tariffs as the only acceptable instrument for limiting imports. The current program has no significant output control features and imports of sugar are being adversely affected by the high support prices for sugar and the encouragement these high prices give to the increased production and use of high fructose sugar from corn.

U.S. imports of sugar have declined from nearly 6 million short tons in the early 1970s to 3 million short tons by 1982. Over the same period of time sugar production in the U.S. has remained approximately constant, with modest year to year variation but no significant trend. The decline in imports of sugar has been due to the increased domestic production and consumption of high fructose sugar, displacing about 20 pounds of sugar per capita between 1970 and 1980. If present trends continue we will be a minor sugar importer by the end of the present decade, primarily due to a price policy that encourages the production and consumption of a substitute for cane and beet sugar. Has any one bothered to ask if such a reduction of sugar imports is in the interest of U.S. agriculture? If so, I do not know who has considered this question.

The commodity programs for major export commodities--wheat, feed grains and cotton--have features that bring U.S. policies into conflict with GATT provisions on the subsidization of output. These programs contain a number of subsidies. Currently the most important ones are the deficiency payments and the subsidies on the storage of grains under the Farmer Held Reserve Program. Until recently the disaster payments program represented a clear subsidy to farm production by making payments when yields were below some specified level. By both reducing risk and increasing the mean level of income, the program encouraged a higher level of output than would have otherwise occurred. The disaster payments program has been replaced by an insurance program, but it must be noted that the insurance program involves a subsidy since premium income will be substantially less than the cost of claims.

The European Community permits free or nearly free entry of a number of nongrain feed materials, including corn gluten feed. Such imports have displaced several million tons of grains, perhaps as many as 14 million tons, in the EC livestock rations; in 1980 corn gluten feed imports were 2.6 million tons, up from 0.7 million tons in 1974. The U.S. now exports 90 percent of its corn gluten feed production of about 3 million tons, compared to just a third a decade ago. One of the important sources of corn gluten meal is the production of high fructose sugar; a much less important source is the production of ethanol for use as a motor fuel. Each of these end products is now heavily subsidized the one by the high domestic price of sugar and the other by the forgiveness of federal and other gasoline taxes on gasohol. In addition, we have had significant credit subsidies and guarantees for the construction of production facilities for ethanol. Small amounts of corn, claimed to be off-grade, have been sold by the Commodity Credit Corporation at subsidized prices for the production of alcohol. While the corn may be off-grade, the corn gluten meal produced from it is not.

One might ask if any one in policy positions in the U.S. Department of Agriculture or in the White House or members of the relevant committees of Congress ever asked the question if the substantial indirect subsidies of such grain substitutes endangers the duty free status of this high quality feeding material. It is more than a little curious that we are satisfying two very small special interest groups, namely domestic sugar producers that number no more than 15,000 and only a handful of firms that produce high fructose sugar.

Moreover, the benefit to corn farmers from the high fructose sugar subsidy and the export of less than 3 million tons of corn gluten feed to the European Community is very small. With the United States producing 250 million tons of feed grains, the increase in grain processed for high fructose sugar and for ethanol, even if this were a net increase, would have little effect upon the U.S. and the international market price for corn and other feed grains. And the EC imports of corn gluten feed do not represent a significant net increase in demand. Thus far these imports appear to have had little effect on EC feed grain production and consequently the increase imports have been largely offset by larger EC grain exports.

Furthermore, it is highly likely that most of the gains from the expanded production and exports of corn gluten feed go to the firms in the wet-milling industry. In the early 1970s corn gluten feed was priced at approximately 10 percent below the price of corn; in the U.S. from 1979 through 1981 corn gluten feed was priced as much as 12 percent more than corn and in one year only 2 percent less (U.S.D.A.). The higher relative price of corn gluten feed compared to corn could not have had a significant effect upon the price farmers received for their corn.

Both the United States and the European Community have had difficulties in disposing of their respective "butter mountains." The European Community, in spite of significant resentment of its citizens, sells some part of its mountain to the Soviet Union at bargain basement prices. People who pay about $2.50 per pound for butter have some reason to resent a sale to the USSR at about a third of that price. Because the U.S. complains so loudly about the EC's use of export subsidies (dumping) to dispose of its agricultural surpluses, there is some sensitivity in Washington about how our actions will be received.

In September 1981 the officials of the U.S. Department of Agriculture came up with a solution to minimize the adverse reactions to a substantial export of butter at a highly subsidized price. The solution, were it a mechanical invention, would have rivaled any Rube Goldberg flight of the imagination (Smith). New Zealand is the world's lowest cost producer of dairy producers and the world's largest exporter. You guessed it! The United States sold 100,000 tons of butter to New Zealand at a price that was less than half our wholesale price at the time. The loss was in excess of $155 million. The butter was disposed of in this way rather than selling directly into the world market for two main reasons:

1. A major buyer of butter in the world market at the time was the Soviet Union--". . . to sell butter at subsidized prices to the Soviet Union would be to send the wrong signal to the Kremlin during a very tense period in foreign relations" (p. 6).
2. The U.S. is said to be very conscious of its commitments "to open and nondiscriminatory world trade and our obligations under the General Agreement on Tariffs and Trade (GATT)" (p. 6). About this time the U.S. had been challenging ". . . Japan's use of subsidized rice exports and the European Community's increase use of subsidies on exports of wheat, flour and poultry, and we are gaining support in these efforts from third countries. To unload 220 million pounds of subsidized butter on the market could call into question the sincerity of these U.S. efforts to restrain the use of subsidies by other nations."

I do not believe that the USDA was able to disprove the famous dictum: "A rose by any other name is still a rose." And so an export subsidy by any other name is still an export subsidy, even when the sale is among friends.

Trade and U.S. Agriculture

The prosperity of U.S. agriculture depends upon export outlets for its production. The production from nearly two fifths of all cropland is exported. We export more than half of the output of wheat, cotton and soybeans and over a third of the output of feed grains. If these markets were lost or significantly reduced, American agriculture would face a long period of adjustment during which returns to farm resources would be adversely affected.

It is not possible to dispute the view that U.S. agriculture has much more to gain from liberalizing agricultural trade than from maintaining the restraints on imports that we have and from the direct and indirect output subsidies. Yet there has been almost no effort made to modify our farm programs to make them more consistent with the GATT principles for governing trade in agricultural products.

During the 1950s and 1960s U.S. agricultural policy was modified by reducing the level of price supports and the need for governmental intervention, such as export subsidies. Over an extended period of time, price supports were reduced to levels that were generally below market prices. The market was permitted to allocate the available supplies among the competing market outlets, including the allocation between the domestic and foreign markets. These changes occurred, however, exclusively for those products for which the U.S. had a comparative advantage, namely the major export crops of cotton, wheat, and feed grains. Soybeans had generally not been burdened with high price supports, except in 1968 when election politics were stronger than economic rationality.

The changes in domestic farm programs were associated with a rapid growth in exports of farm products. The U.S. did not have significant net exports of agricultural products until the early 1970s, but even this small excess was a change from our being a net importer as late as 1956. While the policy changes were effective in achieving an expansion of exports, we did nothing to liberalize trade in certain products where we had severe trade restraints, such as for dairy, peanuts, and sugar until well into the 1970s and not at all for dairy products. And in the mid-1960s, as we were preparing for the Kennedy Round of negotiations, our dedication to liberal trade was revealed by the imposition of quotas on beef and veal imports.

Import quotas and export subsidies continued to be applied to dairy products. Our sugar program remained an affront to liberal trade until 1974 when the sugar program was abolished, but for a relatively brief period (Johnson 1974). Our current sugar program is at least as restrictive as the program of the 1960s and early 1970s. While the peanut program was modified during the 1970s by introducing a two-price system that reduced the degree of subsidization, it still required import quotas to maintain the high domestic price for edible uses of peanuts. The modification to the peanut program that provided for pricing marginal peanut production at approximately the market price has not resulted in a decline in peanut production. In part this may be due to the very high price paid for the so-called quota peanuts.

With the possible exception of the peanut program, we have made no efforts to liberalize trade in the farm products that we would import under a liberal trade regime. We remain in significant violation of GATT principles, or would if we had not used our muscle to obtain a waiver. Some fifteen years ago, as one of the members of the National Advisory Commission on Food and Fiber I presented rough outlines of adjustment programs that would permit eliminating most if not all quantitative restrictions on imports as well as doing away with export subsidies (1967). I believe I made a reasonable case that for peanuts, sugar, manufactured dairy products, rice, wheat, feed grains, wool, cotton and tobacco it would be possible to eliminate the trade disruptive aspects of the then existing commodity programs and, where necessary, to fully compensate all those who would lose from the required program modifications. I do not argue that my proposals were the most appropriate ones that could be devised. What I now say is that I have not seen any alternative proposals that would accomplish the same objectives, including the reduction or elimination of interventions in trade in agricultural products.

The costs of price supports and their associated trade restrictions to consumers and taxpayers for sugar, peanuts and dairy products are so large and the net income benefits so small that it would be possible to compensate all who would lose from trade liberalization from the savings to consumers and taxpayers for a relatively brief period of time, perhaps no more than two to four years. I have made no recent estimates of the costs and net benefits, but in an earlier time I did so. For sugar for the early 1970s I estimated that full compensation for loss of income to producers (present value at 10 percent interest) plus full compensation for the capital loss to processors plus one full year's wages to all employees engaged in sugar production and processing would cost no more than the savings realized in four years from abolishing the sugar program (1974).

Concluding Comments

How far we are from having a consistent and coherent liberal trade policy for the nation and agriculture was recently revealed by the unsuccessful efforts of the U.S. government to negotiate with the P.R.C. textile quotas. The failure to reach an agreement acceptable to both sides resulted in China taking retaliatory measures. It may well be that the retaliatory measures taken by China will hurt China as much as they will U.S. agriculture. But this makes little difference. Another distortion in world trade in farm products has been created as China turns to other and presumably higher cost sources for its cotton, soybeans and synthetic fibers. In many ways our national policy for the textile industry parallels our dairy program--for more than a quarter century major components of the textile industry have been protected by agreements intended to disguise our violation of the GATT principles that oppose quantitative restrictions on imports. Adjustments in textiles that should by now have been completed if we were attempting to adhere to a liberal trade policy have not been made nor is there any evidence that the industry has been given signals that made it clear that adjustments were required. And why should it have adjusted if it could rely upon continued protection? But leaving aside the debacle of the textile quota negotations, it remains true that the textile industry is protected at the expense of the American farmer and, I might add, the American consumer. The American consumer who bears most of the costs by our textile trade policies are those with lower income, since it is low priced textiles that the quotas are primarily designed to exclude.

American agriculture has much to lose from rising protectionism in the world. While the spread of protectionism is due, in part, to the current worldwide recession, it is not obvious that all of the forces in the United States that are pushing protectionist measures will be dissipated by even a strong recovery and prosperity. American farmers should not assume that a return to high levels of employment will be enough to prevent further erosion in our liberal trade policies.

Farmers and those who represent them and support them must be aggressive in resisting the current moves to increased protection and must not relax their vigilance in the expectation that recovery will assure the abolition of some of the recent departures from the principles of freer trade. Some of the industries that are now complaining so strongly about import competition have acquiesced to cost structures that may well have destroyed the comparative advantage such industries may have at one time possessed. If so, it is absolutely essential that no effort be spared to fight the rising tide of protectionism; it cannot be assumed that the tide will recede automatically.

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APPENDIX

STATEMENT OF CLYDE E. SHOREY, JR.
CHAIRMAN, ALLIANCE OF THIRD-CLASS NONPROFIT MAILERS
TO SENATE BUDGET COMMITTEE
FY 1984 BUDGET RESOLUTION

This statement is submitted on behalf of the Allliance of Third-Class Nonprofit Mailers. The Alliance is an affiliation of nonprofit organizations and associations which share in the use of the mail for fund-raising, educational and other materials at reduced postage rates. Among its members are the American Arts Alliance, the American Association of Retired Persons, the American Cancer Society, the March of Dimes Birth Defects Foundation, CARE, the American Association for the Advancement of Science, the Little City Foundation, the Arthritis Foundation, the Muscular Dystrophy Association, Inc., the American National Red Cross, the Consumers Union of United States, Inc., the National Association for the Advancement of Retired People, the National Audubon Society, the National Catholic Development Conference, the National Easter Seal Society, the National Health Council, the National Society to Prevent Blindness, the National Wildlife Federation, Save the Children, St. Jude Children's Research Hospital and the Salvation Army. Each of these organizations is heavily reliant on third-class nonprofit mail, both as a means for the solicitation of private contributions and to facilitate their educational and informational work.

As the members of the Committee are well aware, on January 10, 1982 third-class nonprofit postal rates increased substantially, when the rate shot up from 3.8 cents a piece for standard presorted mail to 5.9 cents a piece. The percentage increases for the three levels of presorted third-class mail were staggering. Standard presort ("all other") mail increased by 55 percent;

five-digit presort mail jumped by 72 percent; and carrier-route mail skyrocketed up an unbelievable 110 percent! That was a more than doubling of the presort subclass which is most heavily utilized by many third-class nonprofit mailers.

Coming on the heels of this January 10 postage increase was the Administration's budget request for FY 83 which sought a $500,000,000 revenue foregone appropriation. This was almost 20 percent below the $615,615,000 which would have been needed in the next fiscal year to maintain the then existing reduced rates for preferred rate mailers. If adopted, the Administration budget request for FY 83 would have resulted in an additional increase of between 0.5 and 1.2 cent rates as of October 1, 1982 for all nonprofit mailers.

Congress, however, did not accept the Administration's proposal. In two separate actions, Congress clearly demonstrated its intent to stabilize nonprofit postal rates. In the first action, in July, 1982, Congress, over Administration opposition, rolled rates back from Step 16 (5.9 cents per piece) to Step 13 (4.9 cents per piece) through additional funding of $42 Million for revenue foregone in the FY 82 Urgent Supplemental Appropriation. Then, in order to hold rates at Step 14 (5.2 cents per piece) during FY 83, Congress set the funding at $789 Million in the 1983 Continuing Resolution. This was substantially higher than the amount authorized by the 1981 Reconciliation Act or the amount requested by the Administration in its 1983 proposed budget.

Now the Administration is back at the same old game. This year, instead of $500 Million, the Administration has requested $400 Million for revenue foregone. This appropriation figure would have the effect of increasing rates to 8.9 cents per piece, way beyond the full attributable cost of 5.9 cents per piece, or Step 16. In fact, an appropriation of $400 Million would increase nonprofit postal rates for carrier-route presort by 100 percent from 3.3 cents per piece to 6.6 cents per piece.

An increase of this magnitude would have a devastating impact on nonprofit organizations. Postage costs for the National Catholic Development Conference would increase by $23 Million and for the March of Dimes and the American Lung Association by over $3 Million each. All third-class nonprofit mailers would pay over $270 Million in increased postage costs -- at the same time that they are being asked to provide increased levels of service.

In order for Congress to stay with its intent of stabilizing nonprofit postal rates, it must appropriate $879 Million. This figure would allow nonprofit postal rates to stay at their current level of Step 14 or 5.2 cents per piece. Anything less than $879 Million would increase nonprofit postal rates and thus jeopardize their ability to continue providing the same level of service that they currently provide.

It is important to remember that the line item in the federal budget may be called "revenue foregone" but the resulting cuts in the line items of the budgets of thousands of nonprofit organizations could be called "programs foregone." For the American Lung Association it is antismoking campaigns and emphyzema research foregone; for the National Wildlife Federation it is environmental education and research foregone; for the Salvation Army it is alcoholism treatment and disaster relief foregone; for Catholic Charities it is food for the needy and family counseling foregone. These programs, not just a few tenths of a cent per envelope mailed, are the reality of the matter which is now in your hands.

Please remember that our organizations representing a cross section of nonprofit America are not just another group of special pleaders. We are not seeking the financial support of the Congress to deliver our programs. Rather we are seeking to deliver services which are not funded by the government. I believe that a strong case can be made out for the preservation of the revenue foregone subsidy which would be persuasive to even the most ardent budget cutter.

At the March of Dimes, which I represent, we receive no federal funds and most of the other members of the Alliance are not substantially reliant upon such funds. The vast percentage of our income is raised in the private sector from individuals, corporations, foundations, and other sources. If we are to rely upon private sources of funding, the art of fund raising becomes important.

One of the most efficient and effective fund-raising tools currently available to the nonprofit community is direct mail solicitation. A sudden and dramatic increase in third-class nonprofit postal rates, the rate at which these fundraising solicitations are mailed, throws into chaos the fundraising programs of literally tens of thousands of nonprofit organizations.

When choosing among alternative types of fundraising devices, cost is the critical point of comparison. Programs are put into effect with substantial lead time. In essence, tens of thousands of nonprofit organizations have relied upon the oft-repeated intent of Congress to maintain revenue foregone appropriations and planned their fundraising campaigns based upon this understanding. This understanding was not unjustly acquired. In the years since the revenue foregone appropriation was originated, the Congress has chosen in every single fiscal year to appropriate the full amount requested by the Postal Service for nonprofit organizations until FY 82. Now in FY 84 it appears possible that even the continuing appropriation could be in jeopardy.

Many of the nation's third-class nonprofit mailers, the nation's independent organizaton, including charitable organizations, educational institutions, hospitals, labor unions, and others wish to decrease their dependence on the federal government by increasing their reliance on private contributions. It makes no sense for the United States Congress to decrease appropriations in the human services area and then expect nonprofit organizations to "pick up the slack" if the Congress is simultaneously threatening the financial lifeline of these organizations through a hefty increase in postal rates for direct mail fundraising. For example, the Salvation Army has experienced a roughly 30 percent increase over 1981 in requests for assistance from destitute families. The increase in demand for its day care facilities have also been dramatic. All this at a time when its ability to raise funds to carry out these programs is being diminished.

Over the years, our organization has become increasingly sophisticated in direct mail techniques. We are able to perfect our skills of targeting and procurement to maximize our rate of return. However, the one expense over which we have no control has been postal rates. While the costs of envelopes, printing, letter shop charges, etc. are stabilized, postal rates continue inexorably upwards. Adjustment to this on a gradual basis is difficult enough, but a sudden jump in these rates would place a heavy burden on these organizations, which some could not sustain.

If the Congress wishes to make the independent sector better able to obtain private contributions, the revenue foregone appropriations must be maintained. If the Congress wishes to cut back federal spending in the areas in which our organizations operate, it must continue full funding of the revenue foregone appropriation. If the Congress wishes to maintain continuity of funding and live up to the agreement with nonprofit mailers to have them pay only their attributable costs, it must approve full funding of the revenue foregone appropriation.

March 17, 1983

Consortium for Citizens with Developmental Disabilities

Task Force on Medicaid
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(703) 683-4202

Statement

Respectfully Submitted

to the

House Budget Committee

and the

Senate Budget Committee

on behalf of

- American Speech-Language-Hearing Association
- Association for Retarded Citizens--U.S.
- National Association of Private Residential Facilities for the Mentally Retarded, Inc.
- National Association of State Mental Retardation Program Directors, Inc.
- National Mental Health Association, Inc.
- United Cerebral Palsy Associations, Inc.

March 14, 1983

The Consortium for Citizens with Developmental Disabilities represents 27 national organizations interested in the welfare of children and adults with severe continuing disabilities originating in childhood. The Task Force on Medicaid is interested specifically in those aspects of the federal-state Medical Assistance program which impact on the capability of states and private providers to furnish appropriate, high quality services to Title XIX-eligible developmentally disabled children and adults. As such, the organizations represented on the Task Force are vitally interested in proposed statutory revisions to Title XIX of the Social Security Act which the Administration plans to introduce later this year. Since the Committee is currently engaged in reviewing the President's FY 1984 budget, in preparation for development of the First Concurrent Budget Resolution for FY 1984, the Task Force would like to share with members of the Committee its views on two proposed Medicaid revisions which are incorporated in President Reagan's FY 1984 budget estimates.

First, the Task Force is opposed to the Administration's plan to institute mandatory co-payments for both categorically eligible and medically needy recipients of Medicaid benefits. We join many other national organizations in questioning the logic of requiring cost sharing on behalf of low income individuals and families who are eligible for Medicaid benefits. The Administration contends that such co-payments would tend to deter unnecessary utilization of medical services. Our concern is that even nominal co-payments might discourage low income participants from seeking prompt medical care and thus avoid complications which would be more costly to treat at a later date.

More importantly, in terms of the specific interests of the developmentally disabled, we wish to point out that a per visit co-payment, even at the nominal levels the Administration is proposing, would have a severe economic impact on the capability of severely disabled persons to utilize attendant care services and transportation services, in those jurisdictions where such services are reimbursable under the state's Medicaid program. To illustrate this point, a severely physically disabled individual, who is eligible for SSI benefits (and thus receives $284 a month if living independently) would have to pay $30 a month, under the Administration's proposal, if he received daily attendant care services, reimbursable through Medicaid. Obviously, this level of payment would constitute a substantial financial impact on an individual who already is living far below the poverty level.

Second, we also oppose the Administration's plan to make the reduction in payments to the states, originally imposed as a temporary expedient by Congress as part of the 1981 Budget Reconciliation Act, a permanent feature of the Medicaid program. The effect of federal payment reductions to date has been to force states to reduce benefits and tighten eligibility in order to compensate for the lower level of federal participation and the severe pressures on state and local budgets. To perpetuate this situation through the proposed legislation would not constitute an equitable solution to the problem of financing health and health-related services for low income Americans.

Finally, we understand that the House Budget Committee is seriously considering the possibility of authorizing federal financial participation in the cost of health assessment services for children six years of age and under whose families do not meet the Medicaid means test but have incomes below a statutorially established threshold. A somewhat similar proposal, referred to as the Child Health Assessment Program (CHAP), was offered by the Carter Administration in the late 1970's. However, it was never approved by Congress.

The CCDD Task Force on Medicaid enthusiastically endorses the concept of expanding Medicaid coverage to include health assessment services to preschool aged children in lower income families that are not currently eligible for Medicaid benefits. Such an expansion in services currently available under the Early and Periodic Screening Diagnosis and Treatment program (EPSDT) would constitute an important stride toward preventing and ameliorating handicapping conditions among infants and young children. The research literature and clinical observations consistently demonstrate that the prospects of preventing or minimizing potentially disabling conditions is markedly increased if the problem is identified early in a child's life and prompt corrective action is taken. The cost effectiveness of early intervention has been proven over and over again. Thus, it seems reasonable to predict that any short term increase in the costs of expanding child assessment services under Medicaid will be more than offset by the long range savings associated with preventing lifelong disabling conditions.

Members and staff of the organizations represented on the Task Force will greatly appreciate your attention to these comments.

STATEMENT
on
THE FISCAL YEAR 1984 BUDGET
before the
SENATE BUDGET COMMITTEE
for the
CHAMBER OF COMMERCE OF THE UNITED STATES
by
Robert T. Thompson*
March 8, 1983

SUMMARY

The U.S. Chamber rejects the myth that there is an inherent "structural deficit" that necessitates substantial tax increases. As an alternative to the Administration's budget, we have developed a modified freeze plan which this testimony details and which we believe is both politically possible and economically desirable. This plan will result in a surplus by 1988 under economic growth conditions experienced on numerous occassions during the post-war era. Our plan requires no magic but only a resolve in the Congress to do what is necessary to reduce the growth of federal spending and responsible action by the Federal Reserve to fulfill its duty to continue to bring down inflation and interest rates.

The paramount economic policy goal at the present time should be achieving sustained noninflationary economic recovery to ensure increases in real incomes for all our citizens. The difficult process of disinflation in 1981 and 1982 has enabled the American economy to begin restructuring its pattern of employment and output to reflect strength in those world markets in which we will be most competitive in the 1980's and beyond. This process, which was necessary to ensure our long-run economic vitality, has nonetheless contributed to exceptionally high unemployment and widening deficits.

The Chamber believes that there is a better way than tax increases to reduce deficits and still achieve the four goals set out in the President's 1981 economic recovery program: 1) reducing the growth of federal spending; 2) reducing the tax burden on capital and labor; 3) removing burdensome regulatory rules on businesses; 4) pursuing a stable policy of monetary growth to ensure high-employment, noninflationary economic growth in the world economy.

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* Chairman of the Board, U.S. Chamber of Commerce; partner, Thompson, Mann, and Hutson

Capping the growth of federal spending has remained the most elusive of the four policy goals. In the past two years, policymakers have drifted from the course of spending control. Instead, they are relying on tax increases to shrink the deficit, without much success, it must be observed.

The Chamber believes that a steady reduction in the deficit, without relying on tax increases, is possible and desirable. Congress can achieve a surplus by 1988, without eliminating tax indexing or enacting any new tax increases, if it is willing to:

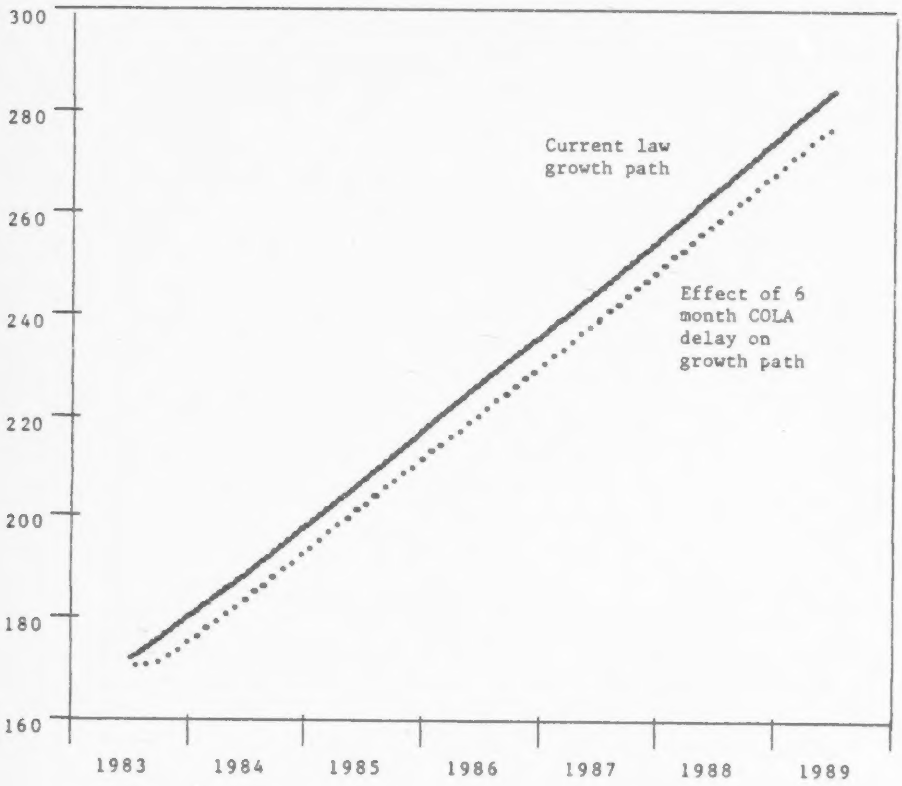
- Enact a permanent equity cap on cost-of-living adjustments (COLAs) of 60% of the change in the Consumer Price Index (CPI) on all indexed retirement and disability programs following a COLA freeze in FY 1984.
- Freeze the rate of growth of medicare and medicaid outlays per recipient in real terms.
- Freeze federal civilian pay in 1984, as the President has requested, then limit payroll growth to 3% a year thereafter.
- Keep real defense increases (other than retirement and pay) at 7% in FY 1984-88, the rate initially sought by the President.
- Adopt the Administration's proposals or equivalent savings in all other outlay categories combined.
- Bring all government and nonprofit workers into the Social Security system in 1984.

PROLOGUE TO THE FISCAL 1984 BUDGET

The Administration and the Congress lost their focus on federal spending control in 1982 after a laudable start in 1981. The loss of focus is symbolized by the change of themes from "budget control" to "deficit reduction." Deficit reduction can mean spending control but it has typically resulted in tax increases. Last year's two reconciliation bills contained nearly four dollars of tax increases for every dollar of spending control. The focus on spending control has also been seriously undermined by the National Commission on Social Security Reform's package of stopgap tax increases. As seen in Figures 1 and 2, not one major provision of this package scales back the rate of growth of Social Security benefits, and the ratio of tax increases to spending control provisions in this package is approximately 4:1. This is a wholly unfair approach to solvency considering that Social Security benefits have risen by 205% since 1970, while after-tax wages have grown by only 110%.

FIGURE ONE

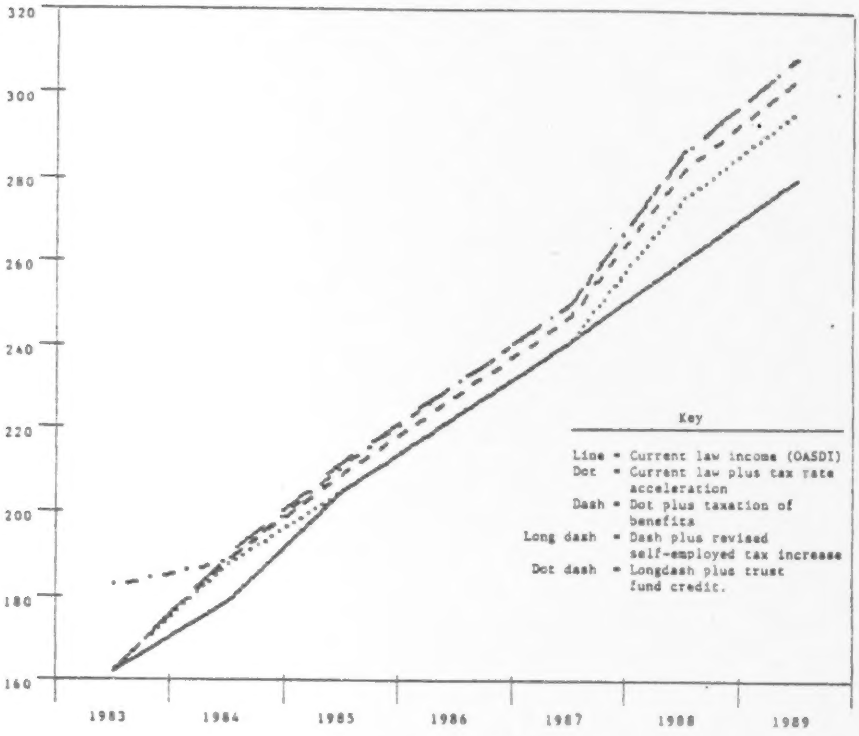
EFFECT OF NATIONAL COMMISSION COMPROMISE
ON RATE OF GROWTH OF
SOCIAL SECURITY BENEFITS



SOURCE: NATIONAL COMMISSION ON SOCIAL SECURITY REFORM.

FIGURE TWO

EFFECT OF NATIONAL COMMISSION COMPROMISE
ON RATE OF GROWTH OF
SOCIAL SECURITY TAXES



SOURCE: NATIONAL COMMISSION ON SOCIAL SECURITY REFORM.

The momentum of entitlement growth built up over the past 15 years, and the rapid rate of increase in defense spending in the Carter and Reagan budget blueprints, are the chief causes of the excessive rate of spending growth. Large interest payments on the debt caused by recent high interest rates are a third important factor.

For two years, government has neglected the policy goal of federal spending control by cutting spending mainly in the small discretionary areas of the budget without tackling the middle-class entitlements or defense spending head on.

THE PRESIDENT'S FY 1984 BUDGET

There is much to praise in the President's FY 1984 budget. For the first time in three years, the Administration has begun to address the two key budget control issues of entitlements, including Social Security, and defense. But while the Administration has gotten its feet wet on the issues, it has not yet plunged in. This is an important precedent, however, and we hope it gives Congress the incentive to plunge in and adopt further restraints on spending growth.

The Administration continues its efforts at controlling the growth of nondefense discretionary programs. If Congress adopts the Administration proposals or equivalent savings, many of these programs will shrink substantially over the next five years.

But there are five major areas of the budget that have not been addressed sufficiently. All of them continue to grow rapidly in the Administration's FY 1984 budget, as Table 1 shows.

Table 1

Administration's Proposed Outlays, FY 1983-88
(billions of dollars)

	FY 1983	FY 1988	% Change
Indexed retirement and disability	$213.2	$293.0	37.4%
Medicare and medicaid	72.3	123.7	71.1
Pay of federal civilian employees	58.4	77.8	33.2
Defense, excluding retirement and pay	123.3	273.0	121.4
Net interest	88.9	134.3	51.1
All other outlays	249.1	225.1	- 9.6
Total budget outlays	805.2	1126.9	40.0

Source: Budget of the United States Government, Fiscal Year 1984. For derivation of categories, See Appendix A.

These five categories will have growth rates ranging from 33% to 121%, even if the Administration's cuts are adopted. Indexed retirement and disability programs, which include Social Security (except medicare), military, civil service, and other retirement, have grown rapidly in recent years because the COLA for these programs is far too generous. Medicare and medicaid continue to grow at double-digit rates each year. Defense (excluding retirement and pay) is projected to grow faster than in 1981, despite much lower inflation. Net interest continues to grow rapidly because the projected deficits remain too high, in spite of large tax increases and spending cuts in limited areas.

While the Administration's budget is a good starting point, much more needs to be done to restrain spending and assu e the preservation of the tax relief enacted in 1981. Overall, the ratio of spending cuts to tax increases in that budget is less than one to one. Instead, if the President's proposed tax

The budget also contains worthwhile proposals for curbing spending in other budget functions. We believe Congress should adopt these or equivalent savings in military pay and nondefense discretionary programs.

THE U.S. CHAMBER'S BUDGET PLAN

The Chamber has developed an alternative budget which incorporates several of our own proposals as well as some of those put forth by the Administration and members of Congress. As Table 2 shows, this plan could yield a substantial surplus by 1988 given favorable economic conditions.

Table 2

Deficits (Surplus) under Administration and Chamber Budgets
(billions of dollars)

	Fiscal Years					
	1983	1984	1985	1986	1987	1988
Deficits under Administration proposals and economic assumptions	208	189	194	148	142	117
Deficits (surplus) under Chamber proposals and CBO high growth path	178	104	64	38	8	(20)

The Chamber's modified freeze incorporates six key principles of spending restraint:

1. COLAs for all indexed retirement and disability programs are frozen for one year to correct for past overindexing due to CPI flaws. Thus outlays grow in fiscal 1984 by the same percentage as the number of beneficiaries. After 1984, these outlays grow by this percentage plus an "equity cap" COLA equal to the average private sector wage COLA of 60% of the CPI change each year.

2. The growth in medicare and medicaid is limited to the percentage growth in the number of beneficiaries forecast by the Administration, plus the change in consumer prices. This leaves the real outlay per beneficiary frozen, unless the change in medical costs can be brought down to less than the change in all prices. Strict limits must be adopted now to avoid an explosive growth of outlays after 1990 as the aged population swells rapidly.

3. The Administration's plan for freezing federal civilian pay in 1984 is accepted. In subsequent years, total payroll is increased by 3% a year. An individual's pay could rise by a higher amount to the extent that productivity gains and program reductions permit attrition in the workforce. Administration estimates for military pay are accepted.

4. Defense outlays other than retirement (under item 1.) and pay (under item 3.) are to grow at 7% each year in real terms, as the President requested in 1981.

5. Administration spending projections are accepted for all other categories combined.

6. All government and nonprofit workers are included in the Social Security system starting in 1984, rather than the far more limited number recommended by the National Commission on Social Security Reform. This approach, combined with the one-year COLA freeze and permanent equity cap, does far more to improve the solvency of the system than the Commission's package, without overburdening existing workers and employers or breaking parity in their payments and without tapping general revenues.

Finally, we have used the Congressional Budget Office's estimates of receipts under a "high-growth path," an economic scenario that we find more believable than the Administration's. In fact, even CBO's so-called "high-growth path," which assumes 4% real growth in gross national product (GNP) this year, 6% in 1984, 4.2% in 1985, and 4% thereafter, may be overly cautious. That path implies a six-year change of 29.2%. This growth rate has been exceeded several times in postwar history: In the six-year periods ending in 1953, 1955, 1966, 1967, 1968, and 1969, real GNP grew by more than 30%. Three times, the cumulative growth exceeded 33.5%. Thus, such growth would by no means be unprecedented.

In 1983, the CBO's higher growth (4% vs. the Administration's 3.1%) and other economic assumptions, plus technical differences in estimation techniques, leave the fiscal 1983 deficit at $178 billion instead of $208 billion, as the Administration predicts. Thereafter, the combination of higher growth and savings from legislative changes cuts the deficit year by year. The lower deficits allow additional savings on net interest costs. By fiscal 1988, our plan would yield a surplus of $20 billion, vs. the Administration's deficit of $117 billion.

The yearly differences between the two plans are shown in Table 3.

Table 3

Savings in Fiscal 1984-88 under Chamber Modified Freeze Budget
Beyond Administration's Budget Proposals
(billions of dollars)

	Fiscal Years				
	1984	1985	1986	1987	1988
Indexed retirement and disability	10	15	22	28	35
Medicare and medicaid	0	5	9	14	22
Federal civilian pay	0	2	5	9	12
Defense (except retirement and pay)	9	27	42	48	52
All other, incl. interest savings from lower deficit	38	44	56	67	70
Total outlay reduction	57	93	134	166	191
Revenue gain from univ. coverage, more growth	39	48	37	35	30
Revenue reduction from keeping current tax law	-11	-11	-61	-67	-84
Net deficit reduction	85	130	110	134	137
Less: Administration's proposed deficit	-189	-194	-148	-142	-117
Modified freeze deficit (surplus)	-104	- 64	- 38	- 8	(20)

Source: See Appendix A.

An Equity Cap on Entitlement COLAs

Chief among the U.S. Chamber's budgetary proposals is the concept of implementing an equity cap on entitlement COLAs including Social Security. Our Board of Directors, in its meeting of February 9, 1983, took the step of recommending a specific COLA reform. Up until this time, our policy position had been to support a permanent change in the COLA cap to something less than the full CPI, but of an unspecified nature. Our recommendation of a specific COLA change this year reflects three considerations:

1. Based upon day-to-day contact with our business members, from individual proprietorships to large corporations, from local chambers to major financial institutions, a permanent COLA cap is the major budgetary issue. All of these groups view it as the key to budget controllability.
2. Congress and the Administration have not yet acted on any of the 15 COLA reforms that have been proposed, despite the fact that many European governments have already reduced or eliminated their automatic COLAs.
3. We believe the proposal we have designed and analyzed is superior to those that have been put forth in the past three years on grounds of fairness and equity, budget controllability, and trust fund solvency.

Equity: Automatic wage COLAs in the private sector have averaged 60% of increases in the CPI. Capping automatic entitlement COLAs at 60% would create equity with private sector practices. The existing cap for entitlements, 100% of CPI increases, is inequitable.

Fairness: Gallup polling shows the public views 60% of CPI as fairer than the 100% now paid. Sixty percent of CPI elicits a stronger sense of fairness and equity in polling than does the "lesser of wage or price increases" cap. Seventy-three percent of Americans supporting an automatic COLA for entitlements believes it should be equal to private sector COLAs. (See Appendix B for specific survey questions and responses.)

Controllability: At rates of inflation in excess of 5%, "60% of CPI" pays out less money than "CPI - 2%" cap and at lower rates it pays out more. For example, if CPI = 10%, then 60% of CPI = 6% and CPI - 2% = 8%. If CPI = 4%, then 60% of CPI = 2.4% while CPI - 2% = 2%. In other words, 60% of CPI provides controllability when it is most needed.

Solvency: The National Commission's COLA cap, "lesser of wage or price increases", even if adopted in 1983 instead of 1988 as planned, would save less than $4 billion between now and 1989, according to National Commission estimates. Sixty percent of CPI would add $140 billion to the trust fund over the same period using National Commission assumptions.

Sixty percent of CPI already has business support beyond the Chamber. It is the preferred COLA cap of the "Bipartisan Appeal Budget", and it has been endorsed by several other organizations.

The most important reason for the current short-term solvency problem in Social Security is the different indexing practices followed by government and the private sector in the face of rapid inflation from 1973 to 1981. This difference is highlighted in Figure 3.

Federal entitlement COLAs, including Social Security, are fixed at the full increase in the CPI, whereas indexation of wages in the private sector is considerably less than 100% of the CPI. As represented by data on automatic COLAs in major collective bargaining agreements, the degree of private sector indexation varies over time between 50% and 70% of increases in the CPI. On average, automatic COLAs in the private sector recover 60% of increases in the CPI.

It is this difference in indexing, along with low productivity growth and recession, that explains the recent phenomenon of benefit growth outpacing wage growth. The full CPI COLA is also the primary reason why growth in other entitlement benefits created a situation of "budget uncontrollability" from 1978 through 1982.

As a result of excessive COLAs, military and civilian retirement pensions are now higher for recent retirees than the salaries of those now occupying their former jobs in government. Private pensions, which are based on sound actuarial practices, seldom have automatic COLAs. Table 4 shows that only 3% of participants in private pension plans are covered by an automatic COLA. For those plans that are covered, two-thirds are subject to a maximum cap of 3% or less on that COLA. Thus a 60%-of-CPI cap for federal retirees still is more generous than all but a handful of private pension plans.

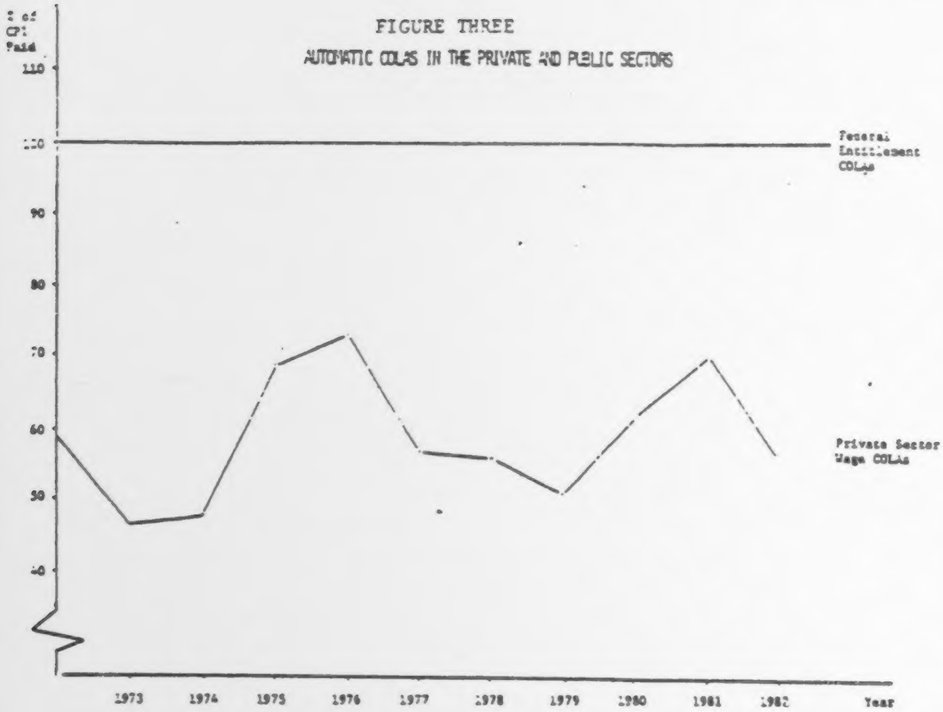


FIGURE THREE

AUTOMATIC COLAS IN THE PRIVATE AND PUBLIC SECTORS

Note: The BLS data through 1980 is a rate of return concept covering CPI changes up to time of COLA payment. Since 1980, the average is calculated as a percent of CPI change during the covered period only, not including any CPI change between covered period and date of payment. According to BLS, the new method of calculation when applied to earlier years does not change the long-run average COLA yield appreciably. Based on sample data, the old method yields a long-run (1968-1982) average of 58 percent, while the new method yields 60 percent of the full CPI change.

Source: U.S. Department of Labor, Bureau of Labor Statistics, Monthly Labor Review, annual, 1972-1982.

Table 4
COLAs in Private Pension Plans, 1980

Percent of plans with COLA in normal retirmement formula	3%
Maximum adjustment to CPI changes:	
3% or less	66%
Over 3%	23%
Full increase in CPI	10%
Total	100%

Note: Because of rounding, sums of individual items may not equal totals.

Source: Bureau of Labor Statistics, U.S. Department of Labor, Employee Benefits in Industry, 1980, September, 1981.

CONCLUSION

We do not accept the myth that there is an inherent "structural deficit" blocking any effort to achieve substantial deficit reduction. Under realistic economic assumptions, with strict but fair changes in law, Congress can eliminate the projected deficits without resorting to tax increases. We urge Congress to approve a budget resolution that puts us on this path to fiscal responsibility and economic prosperity.

Appendix A

DERIVATION OF BUDGET ESTIMATES

Administration's Proposed Outlays

The Administration's budget is divided into over 30 functions and subfunctions (Budget of the United States Government, Fiscal 1984, Summary Table 3, "Budget Outlays by Function, 1982-88," p. 9-5). For ease of analysis, these functions were recombined into the following six categories.

(1) Indexed retirement and disability covers the totals for Social Security, other general retirement, federal employee retirement, and retired pay of military personnel.

(2) Medicare and medicaid and (3) net interest are taken directly from Administration estimates.

(4) Pay of federal civilian employees for 1983 and 1984 is the sum of compensation of employees listed under defense purchases and nondefense purchases (Budget, Special Analysis B, Table 4), less the subfunction "military personnel". For later years compensation is projected to grow from the 1984 figures at the rate of federal pay raises shown in the table "Long-Range Economic Assumptions" (Budget, p. 2-10) plus 1.1%, the average annual within-grade increase. The following totals for civilian pay reflect these assumptions:

	Fiscal Years					
	1983	1984	1985	1986	1987	1988
	(billions of dollars)					
Civilian pay for military agencies	26.4	26.9	28.6	30.4	32.4	34.7
Other civilian pay	32.0	32.2	34.8	37.7	40.4	43.1
Total	58.4	59.1	63.4	68.1	72.8	77.8

(5) Defense excluding retirement and pay equals the budget function for national defense less the subfunctions for military personnel and retirement and less the figure derived above for pay of civilian employees in military agencies.

(6) All other outlays equals total outlays less the sum of the above categories.

Modified Freeze Proposal

The modified freeze plan is based on economic assumptions used by the Congressional Budget Office (CBO) in developing its "high growth path" (CBO, Baseline Budget Projections for Fiscal Years 1984-88, Tables 4 and 5). CBO does not present spending estimates by category for its high growth path, but only an estimate for total outlays. For estimating a baseline for the modified freeze proposal, it was assumed that the only category of spending that changed from CBO's baseline to its high growth path was "all other outlays", a catchall that includes economically sensitive functions such as unemployment compensation, welfare, and net interest.

Baseline outlays are assumed to equal the CBO baseline projections for Social Security, other retirement and disability programs, medicare, and medicaid. Pay of federal civilian workers, defense and nondefense, is assumed to be the same as in (4) above. The estimate for Defense Department civilian pay and the CBO estimates for military retirement and pay are subtracted from the CBO baseline estimate for national defense. The figure for all other outlays is derived by subtracting the sum of the above items from total outlays under CBO's high growth path (CBO, Baseline, Table 5).

Outlays for indexed retirement and disability programs in fiscal 1984 are calculated by increasing the 1983 figure by the percentage growth in recipients (as shown in Budget, Special Analysis A, Table A-7). After 1984, outlays increase by this percentage plus 60% of CBO's high growth path assumption for CPI change (Baseline, Table 4).

The growth in medicare and medicaid is assumed to equal the percent increase in recipients plus the CPI change each year.

The Administration's projection for federal civilian pay in 1984 (as derived above) is accepted, reflecting the proposed one-year freeze. In subsequent years, the 1984 figure is increased 3% annually. The Administration's proposed figure for military pay is accepted and included in the catchall category, "all other outlays."

Defense outlays other than retirement and pay are allowed to grow from the 1983 base amount by 7% plus the GNP deflator assumed in CBO's high-growth path.

A preliminary estimate for all other outlays is derived by subtracting CBO's estimate of the Administration's proposed savings from cuts in (1) nondefense discretionary spending and offsetting receipts and (2) food stamps, SSI, AFDC, farm price supports, and other (CBO, An Analysis of the President's Budgetary Proposals for Fiscal Year 1984, Tables V-1 and V-4) from the high growth path baseline for all other outlays.

Receipts are assumed to equal CBO's high growth path amounts (CBO, Baseline, Table 5) plus revenues from universal Social Security coverage (derived by averaging calendar year estimates in Report of the National Commission on Social Security Reform, January 1983, Appendix K, p. 4).

These assumptions allow a preliminary estimate of receipts, outlays, and the deficit to be calculated. Starting in 1984, net interest is reduced by assuming that the preliminary deficit reduction in that year from the above four assumptions is spread evenly over the year, so that the average deficit reduction during the year is half the year's total. This amount is multiplied by CBO's high growth path estimate for the 91-day Treasury bill rate (CBO, Baseline, Table 4) to produce a further deficit reduction. After 1984, additional savings come from the cumulative total of past years' deficit reductions multiplied by the current year's Treasury bill rate.

Appendix B

CHAMBER/GALLUP SURVEY QUESTIONS AND RESULTS ON PUBLIC ATTITUDES TOWARD FAIRNESS AND COLA REFORM

First Survey:

As shown on this card, Social Security payments have increased by more than the increase in average after-tax earnings. What do you think should be done now -- should there be a one-year freeze on Social Security payments, or should the increase in Social Security payments be linked to the increase in average earnings rather than to the Consumer Price Index, or should Social Security payments continue to be linked to the consumer price index?

Freeze Social Security payments for one year	12%
Link Social Security payments to average earnings	31
Leave Social Security payments linked to CPI	46
Don't know	11

Source: U.S. Chamber of Commerce, Survey Research Center, Consumer Opinion Survey, April, 1982.

Second Survey:

Some types of income payments are automatically increasesd by the same proportion as increases in the Consumer Price Index. Do you believe that these cost-of-living adjustments should automatically be applied to Social Security benefit payments and to federal pension payments for government employees and the military, or should any increases be left up to Congress each year?

		Status	
	Total	Employed	Retired
Should automatically be applied	44%	42%	44%
Should be left up to Congress	45	48	38
Don't know	11	10	18

For those supporting an automatic COLA:

Should these automatic federal government cost-of-living adjustments be greater than, less than, or equal to the average cost-of-living adjustments in labor contracts negotiated with private industry?

Greater than	7%	7%	7%
Less than	11	14	9
Equal to	73	71	68
Don't know	9	7	16

Source: Economic Policy Division, U.S. Chamber of Commerce, Consumer Attitudes Toward Social Security and Cost of Living Adjustments, A Chamber/Gallup Survey, April, 1982.

FY84 BUDGET

Statement of the
American Lung Association
and the
American Thoracic Society

to the

Budget Committee
United States Senate

March 1, 1983

Statement to The Senate Budget Committee
March 1, 1983

We appreciate this opportunity to submit the budget views of the volunteers of the American Lung Association and the health professionals of the American Thoracic Society, ALA's medical section.

Our organization is the country's oldest voluntary health association. The American Lung Association began by working to control and prevent tuberculosis and that effort continues. Our current mission now includes concern for the causes, cures and prevention of all lung diseases. Chronic lung disease is the fastest rising cause of death among the ten leading causes of death and exacts a total economic toll nationwide estimated at $45 billion annually. As this committee well knows, the United States population is rapidly growing older; one result of that trend is that chronic respiratory symptoms are now reported by one in every five persons in this country. Grim as this health picture is, though, it is not hopeless. National programs of disease prevention, health promotion, biomedical research, environmental and occupational hazard control and patient and professional education--much of it is stimulated at the federal level--have greatly improved detection and treatment of many diseases. Furthermore, there are many exciting advances at the threshold of being translated into new forms of treatment at the community level such as in emphysema risk detection.

In recent years, the federal government and the private sector have come to realize that the best possible way to contain spiraling health care costs is prevent people from becoming sick. The Department of Health and Human Services' primary concern of late has been the advocacy of a positive program based on individual lifestyle modification such as smoking cessation to avoid disease and illness. We commend and endorse the most recent Surgeon

General's report on smoking which reminded Americans that cigarette smoking is the single most preventable cause of death in this country. That is one major and practical reason that Public Health Service programs such as those of disease prevention and health promotion must be sustained and nurtured. Instead, the President has recommended a cut of about 1 percent in the total budget for PHS. If exacted, this budget would cut these programs by over 10 percent in real terms since 1982 and almost 20 percent since 1981. The health policy reflected in the budget decisions is indicative of a trend backwards in our health and welfare goals for Americans and contradicts the prevention of disease theme. In recent years, federal discretionary health programs which are such a small part of the national budget have been subjected to more than their share of cuts. We will all pay the price for these so-called "savings" in terms of increased health care problems and costs in the years ahead.

Tuberculosis, an age-old nemesis, is an ironic example of our current health dilemma. At the very time that this country should be able to look ahead to ultimate eradication of this infectious disease, federal funding for treatment and control activities through the Centers for Disease Control to states and cities declined precipitously. Two years ago Congress took cognizance that the TB case rate decline had been interrupted and voted to re-establish a tuberculosis project grant program to assure that limited funds would be earmarked for the problem areas of the country. For the next fiscal year, though, no grant funding was requested by the President. Finally, in December, Congress did appropriate half of the authorized amount (5.0 million). Meanwhile, unnecessary new cases continued to generate additional health care costs, including those covered by Medicare and Medicaid.

Another contradictory public policy situation has developed in the National Institutes of Health. NIH programs are directly related to finding the causes of human diseases, understanding the fundamental biological processes of growth and the biological effects of the environment. It is also the primary source of support and training of the next generation of biomedical scientists. The President's Science Advisor has declared that basic research warrants government support because "it is an investment in the future--in a better quality of life, better security, a better economy and simply better understanding." He also pointed out that there is no other source of basic research on the scale required.

Yet, in recent years, we've been living on our past biomedical research laurels. From 1979 through 1982, NIH funds fell by five percent per annum when adjusted for inflation. The Administration in FY83 recommended a 3 percent "increase" which would have been another step backward, given the inflation rate at the time, but Congress took positive action in the second Continuing Resolution by allocating NIH approximately 10 percent over the year before. Some limited actual growth would occur in research awards and a start made toward regenerating the national priority for national research. Now, in FY84, the President's budget would return NIH to a negative bottom line. The recommended 1.8 percent "increase" would be a 3 percent "decrease" in terms of real dollars. It would be even more traumatic for the two major institutes that are dealing with the major health problems facing our citizens today. The National Cancer Institute is down for a .6 percent "increase" and the National Heart, Lung and Blood Institute for a .8 percent "increase."

It is frustrating that biomedical research is allowed to ebb at a time when our nation's defense and infrastructure are of such concern. Basic research is our first line of health defense and the institutions that comprise infrastructure of the nation's research program which has been of international reknown will be hobbled. Creative and promising young scientists will be diverted to endeavors of lesser national significance just as biomedical science is on the brink of potentially fantastic new discoveries.

A similar enigma is taking place in the prevention and control of occupational and environmental health hazards. These are problems society cannot afford to ignore, and, judging from recent public polls, will not allow to be ignored. The entire population of the country is theoretically at risk of adverse respiratory health consequences from exposure to levels of ambient air pollution above the health standards. Subgroups of the population have been identified which are known to be particularly sensitive to such exposure (patients with chronic obstructive pulmonary disease including asthma--15,600,000; angina pectoris and/or history of heart attack--4,240,000; children under age of 14--50,000; the elderly in general due to declining state of immune system). Yet, research in these areas is on a sharp downward trend just as we are becoming acutely aware of the need for more precise data. And as more reliance is ostensibly being placed on state and local jurisdictions to control air pollution, much less in the way of federal resources is being made available to assist them with this program of nationwide importance.

In another area of major concern to our volunteers throughout the country, we feel it imperative to point out that recent public policy regarding nonprofit postal rates has placed an undue burden on the ability of organizations such as the Lung Association to survive and carry out its mission. The ALA from its beginning has depended upon the mails to raise its support and inform the community. Third-class nonprofit rates escalated precipitously two years ago when the Revenue Foregone budget item was reduced disproportionately. Congress addressed this problem last session and moved to stabilize our rates. Now the President's FY84 budget would destabilize the rates severely--only $400 million is proposed as compared to the current appropriation of $789 million. If Congress concurred, it would have a tremendous and negative impact on non-profit organizations. The ALA and the nonprofit community is eager to meet the challenge to the private sector to do more but can only do so by raising additional funds.

To return to the area of the federal health budget, the programs of the federal government give strength and leadership to our entire system of health care. Without them the system of health service delivery, education and training and research will collapse. In the absence of adequate federal support, neither state nor local governments, nor the private sector are financially capable of continuing these vital programs. The American Lung Association is aware of the current distressing economic climate; however, we are also aware that discretionary health programs are among the most effective of efforts, reducing the need for further outlays for medical care. Further cuts in such programs would be counter-productive, to say the least. Our health budget goal should be to provide for at least a 15 percent increase in discretionary health programs for each of the next three years. Such a target would serve notice that the federal government is moving to reverse the negative trends of recent years and to ultimately restore these programs to the level of national priority they deserve.

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1125 Fifteenth Street, N.W.
Washington, D.C. 20005

202-861-6500

Mortgage Bankers Association of America

March 1, 1983

Honorable Pete Domenici
Chairman
Committee on the Budget
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

MBA opposes setting limits on actuarially sound, non-subsidized, self-supporting Federal Housing Administration (FHA) mortgage insurance and Government National Mortgage Association (GNMA) Mortgage-Backed Security (MBS) programs. Although Congress in the past few years has imposed limits on these programs, it has been sensitive to the need to maintain a viable FHA and GNMA, so it has set these levels high enough to accommodate demand. For FY 1984, MBA proposes that the credit budget levels be set at $45.9 billion for FHA and $68.25 billion for the GNMA-MBS program. These are identical to the limits set by Congress for FY 1983.

A number of factors support setting the ceilings for these programs at these levels. MBA believes that so long as interest rates remain at or near their present levels, housing will recover over the course of the next two years. If this recovery is not to be stymied, there must be adequate sources of mortgage credit. It is essential, therefore, to ensure that the FHA and GNMA-MBS credit budget limits are set high enough to accommodate demand and to provide adequate supplies of mortgage finance for moderate- and middle-income home borrowers.

Traditionally, FHA mortgage insurance has been available to any potential borrower so long as the mortgage being sought fell within the maximum mortgage amount prescribed by Congress. This is still true today, except that if the FHA credit budget limits are reached the program must shut down. If the GNMA-MBS credit budget limits are reached, not only would that program halt, but this would virtually shut down the FHA and Veterans Administration (VA) programs as well. This is because the GNMA-MBS program serves as the conduit to tap into the capital markets in order to sell the majority of both the FHA and VA loans originated. In the first three quarters of 1982, nearly 85 percent of FHA and VA loans were packaged and sold in GNMA-MBS pools. In 1981, over 70 percent of FHA/VA loans were sold via the GNMA-MBS.

Other events have increased the importance of the GNMA-MBS program in the past few years. Thrift institutions, which include savings and loan associations and mutual savings banks, have in the past originated or purchased loans to be held as long-term portfolio investments. Today, the tendency is to purchase securities backed by mortgages, because these securities are liquid and may be marketed readily. This provides a certain amount of insulation from volatile interest rate swings. Recently, thrifts and banks have experienced inflows of deposit funds, due to their expanded powers, which allowed more attractive accounts to be offered. These fund inflows will allow for more investment, but we believe, nonetheless, that the trend toward holding securities rather than mortgages will continue.

The Federal National Mortgage Association (FNMA) has the authority to purchase conventional loans as well as FHA/VA mortgages. In the past year, however, FNMA has sought yields above those available through the sale of GNMA-MBSs. As a result, FNMA's purchases of FHA/VA loans have fallen dramatically. In 1980 FNMA purchases of FHA/VA loans totalled $5,273 million. This figure plummeted in 1981 and by 1982 those purchases had declined to $900 million, less than 20 percent of 1980's volume.

Formerly, FNMA provided a strong market alternative for FHA/VA loans. However, since that market has virtually dried up, the GNMA-MBS program should be given high enough ceilings to provide a sufficient supply of long-term, fixed-rate, mortgage credit. While this does not indicate that FNMA will not purchase FHA/VA loans in the future, it does underscore the importance of providing an adequate credit budget level for GNMA, as well as explain the upsurge in the GNMA commitments to guarantee in FY 1983.

Increases in the FHA and GNMA-MBS credit budget levels will also be necessary because of increased demand for FHA programs. When interest rates fell in September 1982, demand for FHA mortgages mushroomed, so much so that the Administration had to attach to the Continuing Resolution an emergency supplemental request of $6.1 billion for the FHA credit budget limit. HUD, in its budget proposal for FY 1984, has requested $39.8 billion for the FHA programs on the assumption that demand will have decreased by then. For a variety of reasons, MBA does not believe that this will be the case.

Applications to refinance high interest rate loans have recently accounted for approximately 30 percent of FHA applications. While this demand will slack off somewhat, MBA believes that there will still be a strong demand for refinancing funds over the next few years. Seller-financing accounted for a large volume of the loans originated over the past few years. Very often, however, that financing was not long-term, but called for a balloon payment of the mortgage balance after a specified number of years, usually three, five, or seven years. These balloons will continue to mature over the next few years and will require an adequate source of refinancing funds.

The FHA has always played the role of a market innovator. In this regard, HUD is expected to propose an authorization for several types of new experimental FHA programs. A new multi-family co-insurance program, a shared appreciation mortgage (SAM) program for single- and multi-family homes, and an adjustable rate mortgage (ARM) program for single- and multi-family purchasers will increase the attractiveness of FHA programs and will necessitate a higher FHA credit budget ceiling than that proposed by HUD.

Most importantly, activity can be expected to increase because of the housing recovery, if interest rates remain at or near their current levels. Demand for housing has been pentup severely for the last three years. That fact, in addition to demographic demand attributable to new household formations, is likely to keep mortgage activity at high levels. If activity levels for estimating the credit budget limits are predicated on the performance of the mortgage finance markets in the past three years, the limits will seriously underestimate demand for the programs.

New housing starts have been far below those projected as necessary to accommodate housing demand by the "baby boom" generation that is currently reaching prime homebuying age. These potential purchasers have been frustrated in their efforts to afford a home in the past few years while interest rates have been so high. Now that interest rates have abated, it is important to have available an adequate supply of home mortgage credit if the housing needs of these families are to be addressed. In our estimation, at least 1.8 million housing starts per year will be necessary to fill that need. In the past three years housing starts have fallen far below that threshold. While it may be difficult to build and finance enough homes to make up for the past few years, it is important to ensure that mortgage credit is not artificially restricted and mortgage costs increased so as to impede the effort to gear up and at least approach the projected necessary annual levels of new housing production.

Congress should be careful not to overestimate the capacity of the suppliers of conventional funds to provide sufficient volumes of long-term, fixed-rate mortgage funds as have been provided in past economic post-recession periods. The current shakedown period in which the markets are evolving should be handled carefully so as not to create shortages of mortgage credit at a time of unprecedented demand.

We appreciate the opportunity to present our views, and request that this statement be included in the hearing record. We would be happy to furnish any additional information, if needed.

Sincerely,

James M. Wooten

James M. Wooten
President

JMW/rlb

nea
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STATEMENT
OF THE
NATIONAL EDUCATION ASSOCIATION
ON THE
EDUCATION BUDGET FOR FISCAL YEAR 1984

TO THE
COMMITTEE ON BUDGET
SENATOR DOMENICI, CHAIRMAN
U.S. SENATE
MARCH 2, 1983

Mr. Chairman and Members of the Committee:

I am Linda Tarr-Whelan, Director of Government Relations for the National Education Association. The 1.7 million members of the NEA are the teachers, faculty, and educational support personnel in the public schools and institutions of higher education in every state of the union. The men and women who belong to this organization are very concerned about education in the future and the repeated attempts by the Reagan Administration to turn the clock back on educational opportunity.

We appeal to the Members of this Committee and the Congress to continue to oppose the short-sighted budget cuts in education which would lessen our ability as a country to compete in the international arena and to provide for national security. Cuts in education are counter-productive for a nation which is concerned with economic growth, productivity, and recapturing a position of strength in a high-tech world. The voice of the Congress in turning back the Reagan budget and legislative proposals and supporting education has been increasingly strong. There has been an increased recognition that education is an investment in America's future. It is true capital formation—human capital.

The education proposals which we bring you today would reverse the trend of cuts which have been enacted in recent years and would restore to education the same program levels — in 1984 dollars — which existed in 1980. While education would show a zero net growth for the period, education would be held harmless from inflation. The federal dollars in 1984 would buy the same program levels for the same proportion of children as existed before the cuts of recent years. The steady erosion of federal support for education of the past three years, ranging from cuts in elementary and secondary programs to harsh tightening of higher education student assistance -- done at the call of the Reagan Administration — would be reversed.

Education in the context of the Federal budget

Before discussing these proposals in depth, we wish to acknowledge that education cannot be considered alone. It exists within the context of a nation in deep recession and a budget with deep deficits. We believe that the recession and the deficit arise from the policies of this Administration which have combined massive defense increases with large tax cuts for the wealthy and corporations at the expense of average Americans. When combined with massive social program cuts there has been a dramatic reordering of American society — away from equality and toward privilege, away from peace and toward military might.

In this larger context NEA makes two major recommendations which lie outside the area of education.

* In the interest of national security the defense budget must be cut. While there has been a great deal of debate about defense, there has been an insufficient debate about national security. In defining national security the 7,000 delegates at the NEA Representative Assembly in July, 1982, adopted the following language as one of our top legislative priorities:

> "The security and well-being of our nation are enhanced by the pursuit of peace. The most effective guarantees of peace are a solid economy, a well-educated populace, and a stable world community. All efforts which detract from these guarantees shall be actively opposed. The goal of national security through peace can be achieved only by the education of a citizenry to compete and succeed in a

> complex and interdependent world. Therefore the proposed disproportionate allocation of funds increasing the national defense budget and decreasing federal funds for education must be reversed."

NEA cannot claim to be expert in the area of defense. However, we believe that in the interest of national security a freeze in defense spending is not an unreasonable position. We join such organizations as the U.S. Catholic Conference, SANE, the United Food and Commercial Workers, the Council for a New Foreign and Military policy, and the United Church of Christ in urging this Committee to set an absolute ceiling of three percent real growth in the military budget. Such a ceiling would allow attention to the nation's need to have a strong, educated, healthy, employed, and productive citizenry as the basis of our security in the world.

*The third year of the tax cut should be repealed, along with indexing in order to provide sufficient revenue to reduce the deficit and provide resources for those programs which are essential to our economic growth. While we understand that the current debate around a $700 cap on the tax cut is designed to alleviate the burden on working people, the American people have overwhelmingly supported repeal as a sacrifice that they are willing to make to put our economic house in order. NEA believes that the third year of the tax cut and indexing compound the alleviation of responsibility granted to the wealthy and must be repealed.

The Reagan Proposals for Education

This year the Administration seeks to put a more moderate face on its budget initiatives, but what it really seeks is a two billion dollar cut in programs administered by the Department of Education. And then, each year for the next four years, the Administration proposes additional cuts that would wipe out the gains of the last two decades. The chart below shows the extent of these cuts.

Current Services vs. Budget Proposal

(in billions of dollars)

	FY1984	FY1985	FY1986	FY1987	FY1988
Current services estimate	$14.9	$15.7	$16.3	$17.1	$18.0
President's budget request	13.2	13.2	13.2	13.2	13.1
Difference in requirements	1.7	2.5	3.1	3.9	4.8

Mr. Chairman, there are three attachments to this testimony that we would like to have inserted in the record. The first shows the levels of appropriations for principal education programs since Fiscal 1980; the second displays our estimates of the amounts needed for these programs to counter the effects of inflation since 1980; and the third is a state by state analysis of FY80 allocations for several key programs, the amount needed in FY84 for those programs to counter inflation, the President's FY84 request, and the difference between the inflation-adjusted amount and the President's request.

The cuts proposed this year strike at the very heart of programs that have served the national interest of equal educational opportunity for all children.

The two billion dollar cut for this year would remove the additional funding which Congress provided in the Supplemental Appropriation last fall over the President's veto. The cuts in bilingual education would occur at exactly the time when there is a significant growth in the Hispanic population. Many programs of proven worth and minimal funding are eliminated. Of the two dozen programs, Women's Educational Equity is a good example of program extinction planned because of right-wing pressure rather than budgetary considerations or program effectiveness.

In fact, it is difficult to discern any positive philosophy behind this education budget. The President talks about jobs and cuts vocational education. Mrs. Bush leads an effort to overturn illiteracy and the President cuts adult education. Secretary Watt speaks of Indian rights and the President cuts Indian education.

Of the several new initiatives presented in the President's budget, we wish to make specific remarks on a few.

Vouchers

The Administration proposal to promote the use of vouchers is one we must view with great suspicion. Voucher plans proposed in the past have typically been designed to give parents an option as to which school their children will attend. The choice is between public and private schools, and the voucher system is doomed to failure because it makes it impossible for both the public and private schools to develop operating budgets and long-range programs.

This ill-conceived notion is opposed not only by NEA and the public education community; it is opposed by two major private school groups, the U.S. Catholic Conference and the Council of Private American Education.

Math and Science Initiatives

The President also aknowledges that there is some need for improving education in math and science. Legislation to accomplish this worthy end has been proposed by scores of Representatives and Senators, and the list of proposals includes some very good legislation like HR1310 and very broad legislation like HR881, the American Defense Education Act (ADEA). These bills, which NEA supports, provide substantial federal assistance for planning local programs to strengthen instruction in math and science, and other critical areas as well. The Administration proposes, instead, a modest $50 million state block grant effort that cannot possibly reach into every area of need. We recommend, instead, of a token effort, a proper mix of old and tested programs, like compensatory education, with new and promising approaches like ADEA, which would enhance the old Title I programs and reach out in new ways to be of great help to the academically gifted. We specifically propose funding of $300 million in FY84 for HR1310, and $2 billion for the first year of ADEA. This approach would provide a firm and broad base for advancing science and math instruction.

Department of Education

The budget proposes a reorganization of the Department of Education, to be specified at a later time. We see no need for restructuring the agency, and it is clear from the Administration's earlier and as yet unchanged position statements that the real intent of such proposals is to abolish the Department and most of the programs that it administers. We totally reject this position, on the basis of our long-held conviction that there is a legitimate federal role in support of public education and that a well-coordinated federal effort requires an efficient structure. In addition, the policy questions involved in federal support are of such magnitude and of such sensitivity that the administrator of the agency should have Cabinet rank.

We will not belabor this point at this time, but if the Committee wishes to have further documentation of our position, we will gladly furnish it for the record of this hearing.

Tuition Tax Credits

The Administration also proposes, once again, that Congress enact a tuition tax credit plan. The cost of this legislation, according to the President's budget ,message, would be in excess of $630 million in the first year. NEA is unalterably opposed to tuition tax credits, as unsound fiscal policy, unsound educational policy, and unsound public policy. If the budget of the United States is too cramped to allow for continued funding of major education programs, how can the President ask for further depletion of the U.S. Treasury? We believe his proposal is unsound educationally because it would create a 'caste system' in which public schools would become the dumping ground for the disadvantaged. And we are convinced that tuition tax credits, as a back-door financing scheme for church-related schools, would violate the First Amendment doctrine of the separation of church and state.

I would like to turn now to an examination of the major funding proposals in the Administration's budget. Our views on the subject are accompanied by figures which represent the Fiscal 1980 appropriation level; the President's FY 1984 recommendation; and the amount that would be needed to maintain programs at FY1980 levels, adjusted for inflation.

1. Elementary and Secondary Education

* Compensatory Education

The budget proposes $3.0 billion in budget authority and outlays to fund compensatory education for disadvantaged youth. This represents a ten percent reduction from the Congressional Budget Office Fiscal 1984 baseline, and is far less than the $4.3 billion needed to maintain the program at FY 1980 levels. The budget also reflects proposed legislation to give state and local education agencies the option of providing compensatory education services through a voucher system, but the details of the legislation have not yet been announced.

We find any reduction of compensatory education funding to be a major breach of faith with local school systems that have worked for many years to develop good and useful programs to improve the opportunities for children of poverty. Recent studies by the Department of Education show that, as in the past, this program is one of the most popular and successful of all federal education programs. If the Administration seeks to improve the program, we would welcome their forward-looking ideas. To date we have found none.

FY80 funding:	$3.215 billion
FY84 Budget request:	$3.013 billion
Needed in FY84 to counter inflation:	$4.55 billion

* Chapter 2 Block Grants

The budget proposes to fund the block grant program at $450 million in Fiscal 1984, approximately $85 million below the current appropriated level. This would be a cut of 16 percent in a program that gives state and local school systems a degree of flexibility in designing and implementing educational offerings that would otherwise not be available. The programs that were lumped together in the block grant legislation of 1981 served a variety of useful purposes. Among them was the Emergency School Aid program, which has fallen by the wayside. The $100 million annual appropriations for this program were extremely helpful to school districts coping with the difficult problems of desegregation. We support legislation, such as that introduced by Congressman LaFalce and Senator Moynihan, to restore this program as a separate entity, and ask that $100 million be reserved for that purpose.

FY80 funding:	731.9 million
FY84 Budget request:	$450 million
Needed in FY84 to counter inflation:	$1.035 billion

* Education of the Handicapped

Approximately $1.1 billion is requested for education of the handicapped, as opposed to the $1.4 billion needed in FY 1984. This program enjoys tremendous support nationwide because it has opened new educational opportunities for a population group that formerly had little chance to success. It is an expensive program to plan and operate. It requires specially trained personnel, and in many cases important changes in physical plant at the school building level. It requires special curricular planning, individual attention, and instructional materials. To meet its full potential, this program must continue to provide more of the additional costs which cannot be borne by local budgets.

FY80 funding:	$1.049 billion
FY84 Budget request:	$1.023 billion
Needed in FY84 to counter inflation:	$1.484 billion

* Vocational and Adult Education

The Administration proposes new legislation in Fiscal 1984 for vocational and adult education, under a block grant plan, with funding of only $500 million. The vocational education program received $779 million in FY 1980, with $100 million in that year for adult education. Our projection of need, based on inflation, is $1.102 billion for vocational programs and $124.5 million for adult education. The world of work is changing very rapidly, and it is absolutely critical that our young people be prepared with skills that will enable them to compete and to succeed in the job market. Adults who are unemployed or underemployed also need more and better training. The Vocational Education Act has served the nation well, and funding should be increased. In concert with the new jobs training legislation, this program could do much to help alleviate unemployment and underemployment among youth and adults as well.

FY80 funding	$779 million (Vocational only)
FY84 Budget request:	$500 million (Block Grants)
Needed in FY84 to counter inflation:	$1.101 billion (Vocational only)

* Impact Aid

The funding request for impact aid in Fiscal 1984 is $465 million. The Fiscal 1980 appropriation was $825 million, and our estimates show the need for $1.167 billion in Fiscal 1984. No new budget authority is requested for disaster assistance, and construction grants would be targeted on three projects needed in school districts that serve Indian children. At the present time, there is an authorization ceiling of $475 million for impact aid. Funding is going primarily to the "Super-A" districts, while the President asks no funding for the "B" category.

This program has been of significant help to school systems which enroll federally-connected children. This is an obligation that the federal government pays in lieu of taxes. Local school district taxpayers should not have to bear the full burden of school enrollments caused by the activities of the federal government in the community.

FY80 funding:	$825 million
FY84 Budget request:	$465 million
Needed in FY84 to counter inflation:	$1.167 billion

* Indian Education

Indian education payments to local education agencies and other special Indian education programs would be phased out under the Administration budget, with a rescission of $16 million this year and termination in Fiscal 1984. The elimination of this program would be a tragic mistake. First Americans are beginning to enjoy privileges and opportunities of full participation in American democracy, thanks in large part to the educational services that are made available under the federal programs. It is extremely unfair to shift the burden of providing these services to the states while cutting education funding generally.

FY80 funding:	$76 million
FY84 Budget request:	$-0-
Needed in FY84 to counter inflation:	$102.6 million

* Bilingual Education

In Fiscal 1980, bilingual education programs received $191 million, and to reach the same number of non-English speaking students in Fiscal 1984 Congress should appropriate $271 million. The Administration request of $94.5 million is totally inadequate, in view of projects that show a striking increase in the growth of Hispanic and other non-English speaking populations in the nation. Nearly 30 to 40 percent of the labor force growth over the next decade will be primarily Hispanic in origin.

FY80 funding:	$191.5 million
FY84 Budget request:	$94.5 million
Needed in FY84 to counter inflation:	$271 million

2. Higher Education

The budget proposes $6.2 billion in budget authority for higher education programs in Fiscal 1984, which is the amount reflected in the CBO current policy baseline. There is a proposed rescission of $900 million in the guaranteed student loan program, which reflects an Administration re-estimate of what will be needed under the latest economic assumptions and student participation rates. While the rescission assumes no programmatic changes, the Administration seeks to extend the current needs analysis requirement to all students applying for such loans, and increasing the loan origination fee for graduate and professional students to ten percent.

Approximately $3.5 billion is proposed for campus-based programs of student assistance. This level is about $200 million below the current CBO baseline for these programs.

In addition, major funding shifts are proposed in these programs. For example, college work-study is slated for a 57 percent increase over the Administration's Fiscal 1983 level of $540 million, bringing the Fiscal 1984 proposed budget authority to about $850 million. No funding is requested for supplementary opportunity grants, Pell grants or state student incentive grants, and only $4 million is requested for direct student loans to fund entitlement obligations already incurred. In lieu of these programs, the Administration will propose legislation for a new program of 'self-help' grants, with a maximum award of $3,000.

In all student assistance programs, the students would have to come up with $800 or 40 percent of tuition costs in order to qualify under the 'self-help' concept. This requirement would virtually wipe out assistance to students wishing to enroll in community and junior colleges, which have low tuition fees. The $3,000 maximum grants would be of little help to students wishing to enroll in high-priced colleges, and such institutions would be pushed into an undesirable elitist position.

We find these proposals unacceptable in that they change the ground rules for student assistance in ways that shift an intolerable burden to the shoulders of low and middle income parents and students. Rising tuition and other fees have already priced untold thousands of eager, bright students out of the market for higher education. The cost of such proposals falls not only on the students, but on society as a whole.

FY80 funding:	$5.6 billion
FY84 Budget request:	$6.2 billion
Needed in FY84 to counter inflation:	$7.6 billion

*National School Lunch Program

Although not a part of the Education Department budget, the school lunch program is a vital program of concern to us. The program serves 23 million children in over 90,000 schools. Funding cuts have reduced the number of participating children by three million. Thirty five percent of the decline came in the free and reduced price lunch categories. In addition, nearly 2,000 schools have dropped out of the program because of the budget cuts.

The Administration is proposing a series of major new cuts in child nutrition programs that we find cruel and senseless. It proposes to block grant the programs that serve low-income children, with a cut of 29 percent in FY84 and 40 percent in FY85. It proposes to raise reduced price lunch prices. And it would require families to apply for free and reduced price lunches through food stamp offices. We believe that all cuts in these programs should be restored, with a directive from Congress that the Administration conduct an assessment of the needs that must be met in the future.

Conclusion

To summarize our comments on the Fiscal 1984 budget proposals, I must say that this Administration is proposing far more harm than good. We view the so-called 'moderate' reductions in funding as not-so-moderate — rather, a reneging by the Federal Government on long-standing promises. State and local governments are having a hard time making ends meet in the current period of recession and high unemployment. The local property tax has been stretched to the very limits of its effectiveness as a revenue resource, and the tax resources of the states themselves are being strained by pressures of staggering proportions. One of these pressures, the block grant program, gave great responsibilities to the states, but cut funding for program execution drastically.

Nowhere in the federal budget process is there a greater need for expansion than in the field of education, which is the best—and in our view—the only hope for recovery of the American economy,and the only sound basis for national security. We must begin at once to restore hope to those who have fallen, give new promise to those who are beginning in life. To cut the education budget and turn our backs on the children and youth of this nation is to court disaster. We ask this Committee to reject the Administration's efforts and to provide a set of working parameters in the budget resolution that will allow Congress to restore the federal role in education to what it can and should be. Thank you.

Attachment 1

Education Budget and Appropriations - Selected Programs

	Appro. FY '80 Sch.Yr. '80-81	Continuing Resolution FY '81 Sch.Yr. '81-82	Continuing Resolution & Supplemental FY '82 Sch.Yr. '82-83	Continuing Resolution FY '83 Sch.Yr. '83-84	Reagan Rescission and Supplemental Request FY '83 Sch.Yr. '83-84	Reagan Budget Request FY '84 Sch.Yr. '84-85
ESEA (Title I) (ECIA Chapter I) (Basic Grants)	3,215,600,000	3,111,620,000	3,040,980,000 -(2,562,754,000)	3,167,894,000 -(2,687,754,000)	3,033,969,000 -(2,562,753,000)	3,013,969,000 -(2,729,939,000)
State Block Grant (ECIA Chapter 2)	751,896,000 (combined programs)	614,471,000	483,840,000	479,420,000	476,879,000	478,879,000
Impact Aid (Not forward funded)	825,000,000	756,750,000	456,200,000	480,000,000	475,200,000	465,000,000
Education for the Handicapped, Gifted & Talented	1,049,000,000	1,025,231,000	1,068,580,000	1,110,252,000	1,110,252,000	1,110,252,000
Vocational Ed. (Adult Ed.)	779,241,000	681,639,000 +(100,000,000)	648,625,000 +(86,400,000)	721,500,000 +(95,000,000)	721,500,000 +(95,000,000)	500,000,000 (block grant with adult education)
Guaranteed Student Loan Program (GSL) (Entitlement)	1,609,344,000	2,535,470,000	3,073,846,000	3,100,500,000	2,200,500,000	2,047,100,000
Bilingual Education	191,463,000	161,427,000	138,057,000	138,057,000	94,534,000	94,534,000
Education Department	15.6 B	15.2 B	14.6 B	15.1 B	13.87 B	13.19 B

1/ item in parenthesis included in total, previous line

2/ item in parenthesis not included in total, previous line

2/8/83

Attachment 2

Education Budget Adjusted for Inflation

	Appro. FY '80 Sch.Yr. '80-81	1980 Inflation (11.67%)* Continuing Res. FY '81 Sch.Yr. '81-82	1981 Inflation (10.0%)* Continuing Res. FY '82 Sch.Yr. '82-83	1982 Inflation (4.78%)* Continuing Res. FY '83 Sch.Yr. '83-84	1983 Est. Inflation (5.0%)* Appropriation needed FY '84 Sch.Yr. '84-85
Education Department	15,600,000,000	17,400,000,000	19,200,000,000	20,100,000,000	21,100,000,000
ESEA (Title I) (ECIA Chapter I) (Basic Grants)	3,215,600,000	3,590,860,520	3,949,946,572	4,138,754,018	4,345,691,719
State Block Grant (ECIA Chapter 2)	731,896,000	817,308,263	899,039,090	942,013,158	989,113,816
Impact Aid (Not forward funded)	825,000,000	921,277,500	1,013,405,250	1,061,846,021	1,114,938,322
Education for the Handicapped, Gifted & Talented	1,049,000,000	1,171,418,000	1,288,560,130	1,350,153,304	1,417,660,969
Vocational Ed.	779,241,000	870,178,425	957,196,267	1,002,950,249	1,053,097,761
Adult Ed.		100,000,000	110,000,000	115,258,000	121,020,900
Bilingual Ed.	191,463,000	213,806,732	235,187,405	246,429,363	258,750,831

* Figures for FY 81 through FY 84 represent amounts required to maintain FY 1980 funding levels after accounting for inflation. Inflation measure used = CPI - U for the fiscal year running from October 1 through September 30.

1/11/83

ATTACHMENT 3

Attached is a printout of selected federal education programs by state, combining U.S. Department of Education data and NEA Research estimates for FY1980 and FY1984. The purpose of this analysis is to display, by state, the program amounts required in FY1984 to maintain FY1980 funding levels, after adjusting for inflation.

President Reagan's budget request for education in FY1984 represents a significant reduction from FY1980 appropriations. However, the situation appears even graver when the President's budget is compared to FY1984 funding requirements adjusted for inflation. Total Department of Education funding in FY1980 was $15.6 billion. After accounting for inflation measured by the CPI-U, $22.1 billion would be required in FY1984 to maintain the FY1980 funding level. However, the Reagan FY1984 budget contains only $13.2 billion for the Education Department—leaving a $8.9 billion funding gap.

For the programs examined in this printout, a comparison of the Reagan FY1984 request and the inflation-adjusted requirement for FY1984 results in the following funding gaps:

*	ECIA Chapter I	$1.5 billion shortfall under Reagan budget
*	ECIA Chapter II	$556 million shortfall
*	Handicapped	$374 million shortfall
*	Vocational & Adult Ed	$727 million shortfall
*	Impact Aid	$702 million shortfall
*	Education Department	$8.9 billion shortfall

The printout features a four column format showing: 1) the FY1980 appropriation; 2) the Reagan budget request for FY1984; 3) FY1984 funding requirements to maintain FY1980 appropriation levels; and 4) the dollar difference or "inflation gap" between the Reagan request and the inflation-adjusted amounts for FY1984.

Program totals on pages 13 and 14 are displayed for 1) the 50 states and the District of Columbia and 2) the entire U.S. appropriation, including outlying areas not shown. Please refer to footnotes on page 15 for details regarding program contents and sources.

NATIONAL EDUCATION ASSOCIATION PAGE 1

STATUS OF FEDERAL BUDGET FOR EDUCATION

SELECTED PROGRAMS BY STATE FEB 28, 1983

	APPROPRIATION FY 1980	PRESIDENT'S BUDGET REQUEST FY 1984	INFLATION ADJUSTED LEVEL FY 1984	DIFFERENCE REAGAN BUDGET VS. INFLATION ADJ
ALABAMA:				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	73,762,875	58,408,000	104,384,485	-45,976,485
CHAPTER II	12,734,990	8,332,495	18,021,782	-9,689,287
HANDICAPPED	19,884,104	20,134,284	26,935,783	-6,801,499
VOC & ADULT	17,549,393	9,901,000	24,496,546	-14,595,546
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	16,599,986	1,586,839	23,434,578	-21,847,739
ALASKA:				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	7,189,289	6,624,000	10,173,820	-3,549,820
CHAPTER II	3,489,400	2,394,395	5,178,650	-2,784,255
HANDICAPPED	2,169,469	2,280,310	3,070,170	-789,860
VOC & ADULT	1,699,871	608,000	2,372,789	-1,764,789
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	49,263,048	56,382,814	69,713,744	-13,330,930
ARIZONA:				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	35,064,590	32,236,000	46,795,715	-14,559,715
CHAPTER II	8,563,183	5,602,885	12,118,041	-6,515,156
HANDICAPPED	12,696,866	13,849,190	17,967,750	-4,118,560
VOC & ADULT	9,712,425	5,979,000	13,557,226	-7,578,226
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	36,482,183	92,432,399	91,911,572	520,827
ARKANSAS:				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	46,561,046	36,102,000	68,720,444	-32,618,444
CHAPTER II	7,318,960	4,788,790	10,357,300	-5,568,510
HANDICAPPED	10,904,062	12,647,281	15,430,695	-2,783,414
VOC & ADULT	9,522,785	5,723,000	13,850,860	-8,127,860
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	3,841,624	2,061,222	5,436,408	-3,375,186

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STATUS OF FEDERAL BUDGET FOR EDUCATION
SELECTED PROGRAMS BY STATE FEB 28, 1983

	APPROPRIATION FY 1980	PRESIDENT'S BUDGET REQUEST FY 1984	INFLATION ADJUSTED LEVEL FY 1984	DIFFERENCE REAGAN BUDGET VS. INFLATION ADJ
CALIFORNIA				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	321,928,260	299,616,000	455,572,204	-155,956,204
CHAPTER II	69,090,982	45,206,178	97,772,909	-52,566,732
HANDICAPPED	95,380,567	97,401,470	134,976,160	-37,574,690
VOC & ADULT	74,717,809	43,271,000	104,295,909	-61,024,909
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	101,605,145	49,520,415	143,784,764	-94,264,350
COLORADO				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	31,792,273	29,028,000	44,990,383	-15,962,383
CHAPTER II	8,709,562	5,698,660	12,325,187	-6,626,527
HANDICAPPED	11,791,138	11,576,593	16,686,025	-5,109,432
VOC & ADULT	10,699,681	5,855,000	14,935,301	-9,080,301
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	12,905,233	7,305,504	18,262,617	-10,957,113
CONNECTICUT				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	30,507,901	30,818,000	43,172,823	-12,354,823
CHAPTER II	9,441,458	6,177,539	13,360,917	-7,183,378
HANDICAPPED	16,131,220	17,255,079	22,827,817	-5,572,738
VOC & ADULT	10,657,909	5,220,000	14,876,993	-9,656,993
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	5,783,365	5,595,639	8,184,229	-2,588,590
DELAWARE				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	9,920,816	10,148,000	14,039,302	-3,891,302
CHAPTER II	3,659,480	2,394,395	5,178,650	-2,784,255
HANDICAPPED	3,259,459	3,159,349	4,612,567	-1,453,218
VOC & ADULT	2,390,203	1,244,000	3,336,399	-2,092,399
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	3,336,868	15,639	4,722,111	-4,706,472

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	APPROPRIATION FY 1980	PRESIDENT'S BUDGET REQUEST FY 1984	INFLATION ADJUSTED LEVEL FY 1984	DIFFERENCE REAGAN BUDGET VS. INFLATION ADJ
DISTRICT OF COLUMBIA				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	18,317,754	14,752,000	25,922,109	-11,170,109
CHAPTER II	3,659,480	2,394,395	5,178,650	-2,784,255
HANDICAPPED	825,827	781,901	1,168,655	-386,754
VOC & ADULT	2,487,931	1,020,000	3,472,814	-2,452,814
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	3,953,176	988,386	5,565,966	-4,577,580
FLORIDA				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	108,348,080	110,092,000	153,327,246	-43,235,246
CHAPTER II	26,641,014	17,431,196	37,700,571	-20,269,375
HANDICAPPED	35,024,362	38,672,823	49,564,120	-10,891,297
VOC & ADULT	31,957,820	19,914,000	44,608,775	-24,694,775
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	22,026,615	9,207,209	31,173,414	-21,966,205
GEORGIA				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	82,845,811	75,253,000	117,238,072	-41,985,072
CHAPTER II	18,151,021	11,876,199	25,686,103	-13,809,904
HANDICAPPED	26,901,526	30,962,191	38,069,229	-7,107,038
VOC & ADULT	23,057,051	13,269,000	32,184,510	-18,915,510
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	21,609,556	2,452,197	30,580,390	-28,128,192
HAWAII				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	10,434,531	9,217,000	14,766,278	-5,549,278
CHAPTER II	3,659,480	2,394,395	5,178,650	-2,784,255
HANDICAPPED	2,797,917	3,245,524	3,959,424	-713,900
VOC & ADULT	3,580,165	1,922,000	4,997,424	-3,075,424
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	16,223,110	10,084,036	22,957,854	-12,873,818

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	APPROPRIATION FY 1980	PRESIDENT'S BUDGET REQUEST FY 1984	INFLATION ADJUSTED LEVEL FY 1984	DIFFERENCE REAGAN BUDGET VS. INFLATION ADJ
IDAHO				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	10,171,857	9,986,000	14,394,559	-4,408,559
CHAPTER II	3,659,460	2,394,395	5,178,650	-2,784,255
HANDICAPPED	4,707,570	4,545,870	6,661,836	-2,115,966
VOC & ADULT	3,969,613	2,200,000	5,541,040	-3,341,040
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	5,042,439	3,638,677	7,135,720	-3,497,043
ILLINOIS				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	142,541,456	158,823,000	201,715,516	-42,892,516
CHAPTER II	35,423,766	23,177,744	50,129,331	-26,951,587
HANDICAPPED	60,279,705	61,469,842	85,303,782	-23,833,940
VOC & ADULT	38,698,971	21,359,000	54,018,505	-32,659,505
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	14,705,196	9,646,143	20,809,804	-11,163,660
INDIANA				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	40,318,687	44,077,000	57,056,417	-12,979,417
CHAPTER II	17,711,885	11,588,872	25,064,666	-13,475,794
HANDICAPPED	24,871,398	24,781,959	35,196,329	-10,414,370
VOC & ADULT	21,758,271	12,356,000	30,371,590	-18,015,590
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	3,154,895	1,415,852	4,464,595	-3,048,743
IOWA				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	26,353,442	25,688,000	37,293,699	-11,605,699
CHAPTER II	8,929,131	5,842,324	12,635,906	-6,793,582
HANDICAPPED	15,964,831	15,602,891	22,592,355	-6,989,464
VOC & ADULT	11,535,857	5,985,000	16,102,489	-10,117,489
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	767,027	210,605	1,085,445	-874,840

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	APPROPRIATION FY 1980	PRESIDENT'S BUDGET REQUEST FY 1984	INFLATION ADJUSTED LEVEL FY 1984	DIFFERENCE REAGAN BUDGET VS. INFLATION ADJ
KANSAS				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	22,626,609	19,890,000	32,019,724	-12,129,724
CHAPTER II	6,879,822	4,501,463	9,735,862	-5,234,399
HANDICAPPED	10,023,740	11,190,286	14,184,934	-2,994,648
VOC & ADULT	9,321,622	4,563,000	13,011,718	-8,448,718
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	8,310,559	7,544,260	11,760,538	-4,216,278
KENTUCKY				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	61,777,854	51,695,000	87,424,052	-35,729,052
CHAPTER II	11,783,526	7,709,952	16,675,253	-8,965,301
HANDICAPPED	17,348,904	18,868,327	24,551,002	-5,682,675
VOC & ADULT	15,965,951	9,144,000	22,286,270	-13,142,270
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	18,609,598	99,047	26,335,051	-26,236,004
LOUISIANA				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	90,533,026	70,312,000	128,116,526	-57,804,526
CHAPTER II	14,271,972	9,338,140	20,196,734	-10,858,594
HANDICAPPED	21,589,147	20,943,302	30,551,509	-9,608,207
VOC & ADULT	18,661,447	9,883,000	26,048,844	-16,165,844
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	7,755,170	2,559,585	10,974,595	-8,415,010
MAINE				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	14,080,980	13,008,000	19,926,499	-6,918,499
CHAPTER II	3,689,480	2,394,395	5,178,650	-2,784,255
HANDICAPPED	6,195,183	6,760,298	8,767,006	-2,006,708
VOC & ADULT	5,139,365	2,795,000	7,173,855	-4,378,855
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	3,660,336	3,036,054	5,179,861	-2,143,807

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SELECTED PROGRAMS BY STATE FEB 28, 1983

	APPROPRIATION FY 1980	PRESIDENT'S BUDGET REQUEST FY 1984	INFLATION ADJUSTED LEVEL FY 1984	DIFFERENCE REAGAN BUDGET VS. INFLATION ADJ
MARYLAND				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	52,273,824	47,120,000	73,974,559	-26,854,559
CHAPTER II	13,247,318	8,667,710	18,746,712	-10,079,002
HANDICAPPED	24,444,816	24,658,591	34,592,659	-9,934,068
VOC & ADULT	15,466,236	8,368,000	21,870,731	-13,502,731
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	21,662,262	7,916,469	30,654,976	-22,738,507
MASSACHUSETTS				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	68,262,363	74,913,000	96,600,513	-21,687,513
CHAPTER II	17,053,177	11,157,881	24,132,508	-12,974,628
HANDICAPPED	34,614,196	34,325,461	48,983,281	-14,657,820
VOC & ADULT	22,383,721	11,571,000	31,244,633	-19,673,633
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	10,853,957	5,064,955	15,359,790	-10,294,834
MICHIGAN				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	132,044,580	131,938,000	186,861,011	-54,923,011
CHAPTER II	30,520,063	19,969,254	43,189,940	-23,220,686
HANDICAPPED	39,669,607	39,762,505	56,137,759	-16,375,254
VOC & ADULT	34,585,456	19,129,000	48,276,597	-29,147,597
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	7,070,259	5,495,549	10,005,355	-4,509,806
MINNESOTA				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	41,799,441	35,659,000	59,151,885	-23,492,885
CHAPTER II	12,734,990	8,332,495	18,021,702	-9,689,207
HANDICAPPED	22,469,158	21,539,862	31,796,840	-10,256,978
VOC & ADULT	16,312,599	8,329,000	22,770,116	-14,441,116
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	4,601,761	3,510,437	6,512,105	-3,001,668

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	APPROPRIATION FY 1980	PRESIDENT'S BUDGET REQUEST FY 1984	INFLATION ADJUSTED LEVEL FY 1984	DIFFERENCE REAGAN BUDGET VS. INFLATION ADJ
MISSISSIPPI				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	73,432,608	54,401,000	103,917,112	-49,516,112
CHAPTER II	8,855,942	5,794,436	12,532,333	-6,737,897
HANDICAPPED	11,021,465	12,977,131	15,596,836	-2,619,704
VOC & ADULT	11,571,904	6,763,000	16,152,806	-9,389,806
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	6,204,085	2,697,209	8,779,604	-6,082,395
MISSOURI				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	54,212,308	47,278,000	76,717,891	-29,439,891
CHAPTER II	14,857,469	9,721,244	21,025,318	-11,304,075
HANDICAPPED	25,935,173	26,961,923	36,701,712	-9,739,789
VOC & ADULT	20,357,006	10,885,000	28,415,614	-17,530,614
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	7,710,376	4,733,408	10,911,205	-6,177,797
MONTANA				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	10,603,278	9,089,000	15,005,078	-5,916,078
CHAPTER II	3,659,480	2,394,395	5,178,650	-2,784,255
HANDICAPPED	3,386,141	3,861,643	4,791,839	-930,196
VOC & ADULT	3,706,897	1,826,000	5,174,325	-3,348,325
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	11,980,780	16,188,444	16,954,394	-765,930
NEBRASKA				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	16,208,707	14,198,000	22,937,521	-8,739,521
CHAPTER II	4,757,324	3,112,713	6,732,245	-3,619,531
HANDICAPPED	8,413,689	8,718,343	11,906,487	-3,188,144
VOC & ADULT	6,615,948	3,237,000	9,234,964	-5,997,964
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	6,923,015	9,048,733	9,796,985	-748,252

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	APPROPRIATION FY 1980	PRESIDENT'S BUDGET REQUEST FY 1984	INFLATION ADJUSTED LEVEL FY 1984	DIFFERENCE REAGAN BUDGET VS. INFLATION ADJ
NEVADA				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	4,882,694	5,904,000	6,909,675	-1,005,675
CHAPTER II	3,659,480	2,394,395	5,178,650	-2,784,255
HANDICAPPED	2,961,773	3,274,165	4,191,302	-917,137
VOC & ADULT	2,354,569	1,493,000	3,286,650	-1,793,650
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	5,044,232	2,917,197	7,138,258	-4,221,060
NEW HAMPSHIRE				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	6,425,642	6,570,000	9,093,156	-2,523,156
CHAPTER II	3,659,480	2,394,395	5,178,650	-2,784,255
HANDICAPPED	2,392,648	3,202,246	3,385,914	-183,669
VOC & ADULT	3,714,265	2,017,000	5,184,609	-3,167,609
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	2,167,319	2,117,522	3,067,044	-949,522
NEW JERSEY				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	79,406,091	94,264,000	112,370,402	-18,106,402
CHAPTER II	22,542,397	14,749,473	31,900,483	-17,151,010
HANDICAPPED	38,417,589	43,322,565	54,365,981	-11,043,416
VOC & ADULT	24,746,705	13,304,000	34,543,038	-21,239,038
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	12,185,766	8,592,074	17,244,476	-8,652,402
NEW MEXICO				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	26,196,096	22,510,000	37,071,033	-14,561,033
CHAPTER II	4,464,566	2,921,162	6,317,953	-3,396,791
HANDICAPPED	5,358,984	6,542,308	7,583,674	-1,041,365
VOC & ADULT	5,968,572	3,257,000	8,331,316	-5,074,316
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	27,451,796	31,102,870	39,130,961	-8,028,091

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	APPROPRIATION FY 1980	PRESIDENT'S BUDGET REQUEST FY 1984	INFLATION ADJUSTED LEVEL FY 1984	DIFFERENCE REAGAN BUDGET VS. INFLATION ADJ
NEW YORK				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	282,341,607	314,235,000	399,551,714	-85,316,714
CHAPTER II	52,403,754	34,287,736	74,158,266	-39,870,530
HANDICAPPED	54,105,469	60,413,887	76,566,419	-16,152,533
VOC & ADULT	63,982,052	33,960,000	89,310,251	-55,350,251
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	42,445,718	7,182,478	60,066,324	-52,883,846
NORTH CAROLINA				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	93,794,106	71,972,000	132,731,397	-60,759,397
CHAPTER II	18,516,969	12,115,639	26,203,968	-14,088,330
HANDICAPPED	29,762,607	31,765,136	42,118,042	-10,352,906
VOC & ADULT	25,623,721	14,675,000	35,767,233	-21,092,233
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	26,412,021	2,976,626	37,376,515	-34,399,889
NORTH DAKOTA				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	9,190,532	6,697,000	13,005,851	-6,308,851
CHAPTER II	3,659,480	2,394,395	5,178,650	-2,784,255
HANDICAPPED	2,516,115	2,711,248	3,560,637	-849,389
VOC & ADULT	3,202,297	1,436,000	4,469,972	-3,033,972
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	7,765,917	9,782,724	10,989,803	-1,207,079
OHIO				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	94,598,969	100,280,000	133,870,387	-33,590,387
CHAPTER II	34,083,164	22,267,873	48,161,444	-25,893,570
HANDICAPPED	50,694,743	53,669,892	71,739,789	-18,069,897
VOC & ADULT	42,226,570	22,845,000	58,942,554	-36,097,554
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	9,760,423	2,372,960	13,812,294	-11,439,334

STATUS OF FEDERAL BUDGET FOR EDUCATION
SELECTED PROGRAMS BY STATE FEB 28, 1983

	APPROPRIATION FY 1980	PRESIDENT'S BUDGET REQUEST FY 1984	INFLATION ADJUSTED LEVEL FY 1984	DIFFERENCE REAGAN BUDGET VS. INFLATION ADJ
OKLAHOMA				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	36,635,151	30,726,000	51,843,713	-21,117,713
CHAPTER II	9,148,700	5,985,987	12,946,625	-6,960,637
HANDICAPPED	16,249,600	17,605,131	22,995,341	-5,390,209
VOC & ADULT	11,937,287	6,360,000	16,662,831	-10,302,831
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	21,962,921	17,737,769	31,080,448	-13,342,679
OREGON				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	33,113,519	30,042,000	46,860,126	-16,818,126
CHAPTER II	7,758,098	5,076,117	10,978,738	-5,902,620
HANDICAPPED	10,652,541	10,913,182	15,074,759	-4,161,577
VOC & ADULT	9,152,628	5,556,000	12,775,839	-7,219,839
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	3,518,756	2,151,929	4,979,507	-2,827,578
PENNSYLVANIA				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	137,130,071	138,558,000	194,057,672	-55,499,672
CHAPTER II	35,057,818	22,938,304	49,611,466	-26,673,162
HANDICAPPED	47,523,039	47,599,489	67,251,407	-19,651,918
VOC & ADULT	45,298,202	25,176,000	63,230,135	-38,054,135
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	10,784,383	1,366,850	15,261,333	-13,894,483
RHODE ISLAND				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	10,321,952	10,316,000	14,606,964	-4,290,964
CHAPTER II	3,659,480	2,394,395	5,178,690	-2,784,295
HANDICAPPED	4,114,976	4,917,398	5,823,237	-905,839
VOC & ADULT	4,082,728	2,083,000	5,629,140	-3,546,140
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	2,551,240	2,076,861	3,610,343	-1,533,482

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STATUS OF FEDERAL BUDGET FOR EDUCATION
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	APPROPRIATION FY 1980	PRESIDENT'S BUDGET REQUEST FY 1984	INFLATION ADJUSTED LEVEL FY 1984	DIFFERENCE REAGAN BUDGET VS. INFLATION ADJ
SOUTH CAROLINA				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	57,429,006	43,232,000	81,269,842	-38,037,842
CHAPTER II	10,392,923	6,800,082	14,707,366	-7,907,284
HANDICAPPED	19,017,288	18,683,431	26,911,986	-8,228,555
VOC & ADULT	14,159,900	8,240,000	19,765,296	-11,525,296
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	14,207,923	4,363,285	20,106,097	-15,742,812
SOUTH DAKOTA				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	9,586,812	9,170,000	13,566,641	-4,396,641
CHAPTER II	3,659,460	2,394,395	5,178,650	-2,784,255
HANDICAPPED	2,601,130	3,094,866	3,680,944	-586,078
VOC & ADULT	3,437,768	1,622,000	4,798,657	-3,176,657
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	12,984,168	20,048,173	18,377,151	1,671,022
TENNESSEE				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	68,306,883	57,884,000	96,663,515	-38,779,515
CHAPTER II	14,345,162	9,386,028	20,300,307	-10,914,279
HANDICAPPED	25,173,999	27,969,190	35,624,549	-7,655,359
VOC & ADULT	19,465,554	11,451,000	27,199,186	-15,748,186
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	8,043,576	922,702	11,382,728	-10,460,026
TEXAS				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	254,993,668	211,352,000	363,680,938	-152,328,938
CHAPTER II	46,329,017	30,313,041	65,561,707	-35,248,667
HANDICAPPED	69,680,787	73,554,734	98,607,561	-25,052,827
VOC & ADULT	52,665,578	29,299,000	73,486,074	-44,187,074
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	35,306,920	20,369,294	49,963,977	-29,594,684

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STATUS OF FEDERAL BUDGET FOR EDUCATION
SELECTED PROGRAMS BY STATE FEB 28, 1983

	APPROPRIATION FY 1980	PRESIDENT'S BUDGET REQUEST FY 1984	INFLATION ADJUSTED LEVEL FY 1984	DIFFERENCE REAGAN BUDGET VS. INFLATION ADJ
UTAH				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	10,086,746	10,909,000	14,245,813	-3,336,813
CHAPTER II	5,194,462	3,400,041	7,353,683	-3,953,642
HANDICAPPED	9,435,543	9,903,995	13,352,546	-3,448,550
VOC & ADULT	6,122,397	3,444,000	8,546,034	-5,102,034
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	7,806,237	4,213,150	11,046,861	-6,833,711
VERMONT				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	6,519,678	5,929,000	9,226,230	-3,297,230
CHAPTER II	3,659,480	2,394,395	5,178,650	-2,784,255
HANDICAPPED	2,788,948	2,557,333	3,946,732	-1,389,399
VOC & ADULT	2,434,529	1,273,000	3,398,272	-2,125,272
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	156,648	3,128	221,678	-218,550
VIRGINIA				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	62,196,550	52,740,000	88,016,564	-35,276,564
CHAPTER II	16,467,660	10,774,777	23,303,924	-12,529,147
HANDICAPPED	24,026,652	26,515,498	34,000,901	-7,485,404
VOC & ADULT	21,772,924	11,665,000	30,392,044	-18,727,044
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	42,800,669	15,489,922	60,568,627	-45,078,705
WASHINGTON				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	45,188,857	44,215,000	63,948,349	-19,733,349
CHAPTER II	12,295,853	8,045,167	17,400,264	-9,355,096
HANDICAPPED	13,801,568	16,655,223	19,531,050	-2,875,827
VOC & ADULT	13,726,356	7,977,000	19,160,128	-11,183,128
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	23,474,510	16,589,865	33,219,547	-16,629,682

STATUS OF FEDERAL BUDGET FOR EDUCATION
SELECTED PROGRAMS BY STATE FEB 28, 1983

	APPROPRIATION FY 1980	PRESIDENT'S BUDGET REQUEST FY 1984	INFLATION ADJUSTED LEVEL FY 1984	DIFFERENCE REAGAN BUDGET VS. INFLATION ADJ
WEST VIRGINIA				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	30,038,237	24,005,000	42,508,184	-18,503,184
CHAPTER II	6,074,737	3,974,696	8,596,559	-4,621,863
HANDICAPPED	8,852,962	10,526,212	12,528,116	-2,001,904
VOC & ADULT	8,087,196	4,741,000	11,288,627	-6,547,627
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	475,802	50,045	673,323	-623,278
WISCONSIN				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	49,809,107	43,899,000	70,486,650	-26,587,650
CHAPTER II	14,930,678	9,769,132	21,128,891	-11,359,760
HANDICAPPED	17,473,582	19,362,465	24,727,437	-5,364,973
VOC & ADULT	19,998,070	10,181,000	27,356,243	-17,175,243
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	4,546,579	4,475,886	6,434,013	-1,958,127
WYOMING				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	5,132,103	4,136,000	7,262,623	-3,126,623
CHAPTER II	3,659,480	2,394,395	5,178,650	-2,784,255
HANDICAPPED	2,417,932	2,652,352	3,421,695	-769,343
VOC & ADULT	1,774,604	841,000	2,477,106	-1,636,106
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	5,623,392	5,362,096	7,957,846	-2,595,750
50 STATES & D.C.				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	3,049,220,397	2,859,892,000	4,315,060,925	-1,455,168,925
CHAPTER II	718,868,251	470,354,954	1,017,293,978	-546,939,025
HANDICAPPED	1,027,871,921	1,086,346,774	1,454,575,179	-368,228,405
VOC & ADULT	860,170,331	475,213,000	1,200,680,909	-725,467,909
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	760,463,531	662,703,150	1,076,156,820	-413,453,669

STATUS OF FEDERAL BUDGET FOR EDUCATION
SELECTED PROGRAMS BY STATE FEB 28, 1983

	1/ APPROPRIATION FY1980	PRESIDENT'S BUDGET REQUEST FY 1984	INFLATION ADJUSTED LEVEL FY 1984	DIFFERENCE REAGAN BUDGET VS. INFLATION ADJ
U.S. TOTAL				
FORWARD FUNDED:	(SY 80-81)	(SY 84-85)	(SY 84-85)	(SY 84-85)
CHAPTER I	3,215,593,000	3,013,969,000	4,550,500,751	-1,536,531,751
CHAPTER II	731,896,000	478,879,000	1,035,729,972	-556,850,972
HANDICAPPED	1,049,000,000	1,110,252,000	1,484,474,215	-374,222,215
VOC & ADULT	879,241,000	500,000,000	1,227,300,972	-727,300,972
CURRENT FUNDED:	(SY 79-80)	(SY 83-84)	(SY 83-84)	(SY 83-84)
IMPACT AID	825,000,000	465,000,000	1,167,484,488	-702,484,488
U.S. DEP ED	15,600,000,000	13,191,889,000	22,076,070,000	-8,884,181,000

1/ FIGURES IN THIS CHART REFLECT ACTUAL TOTAL FY1980 APPROPRIATION; IN THE PRECEDING CHART, NATIONAL TOTALS ARE DIFFERENT BECAUSE THEY SHOW ONLY AMOUNTS AVAILABLE UNDER FORMULA PORTIONS OF PROGRAMS (E.G. BASIC STATE GRANTS).

	APPROPRIATION FY 1980	PRESIDENT'S BUDGET REQUEST FY 1984	INFLATION ADJUSTED LEVEL FY 1984	DIFFERENCE REAGAN BUDGET VS. INFLATION ADJ

ECIA CHAPTER I. STATE AMOUNTS OBTAINED FROM U.S. DEPT OF ED. DOES NOT INCLUDE MIGRANT EDUCATION.

ECIA CHAPTER II. STATE AMOUNTS ESTIMATED BY NEA RESEARCH BASED ON STATE SHARES SUPPLIED BY NCES AND U.S. TOTALS FROM THE DEPT OF ED.

EDUCATION FOR THE HANDICAPPED. FY 1980 AND FY 1984 PRESIDENT'S REQUEST ESTIMATED BY NEA RESEARCH USING U.S. DEPT ED STATE SHARES FOR THE STATE GRANT AND PRESCHOOL INCENTIVE GRANT COMPONENTS OF THE HANDICAPPED PROGRAM.

VOCATIONAL AND ADULT EDUCATION. FY 1980 AMOUNTS ESTIMATED BY NEA RESEARCH FY 1984 PRESIDENT'S REQUEST -- U.S. DEPT ED.

IMPACT AID. STATE AMOUNTS ESTIMATED BY NEA RESEARCH USING U.S. DEPT ED STATE SHARES FOR SECTIONS 3A AND 3B OF THE IMPACT AID PROGRAM.

AMOUNTS FOR FY 1984 INFLATION-ADJUSTED COLUMN OBTAINED BY ADJUSTING 1980 PROGRAM TOTALS FOR INFLATION, AS MEASURED BY THE CPI-U. STATE DISTRIBUTION FOR FY 1980 THEN APPLIED TO FY 1984 INFLATION-ADJUSTED TOTALS.

CPI-U DATA FOR FISCAL YEARS 1980 THROUGH 1983 PROVIDED BY THE CONGRESSIONAL BUDGET OFFICE.

DETAIL MAY NOT ADD TO TOTAL DUE TO ROUNDING..